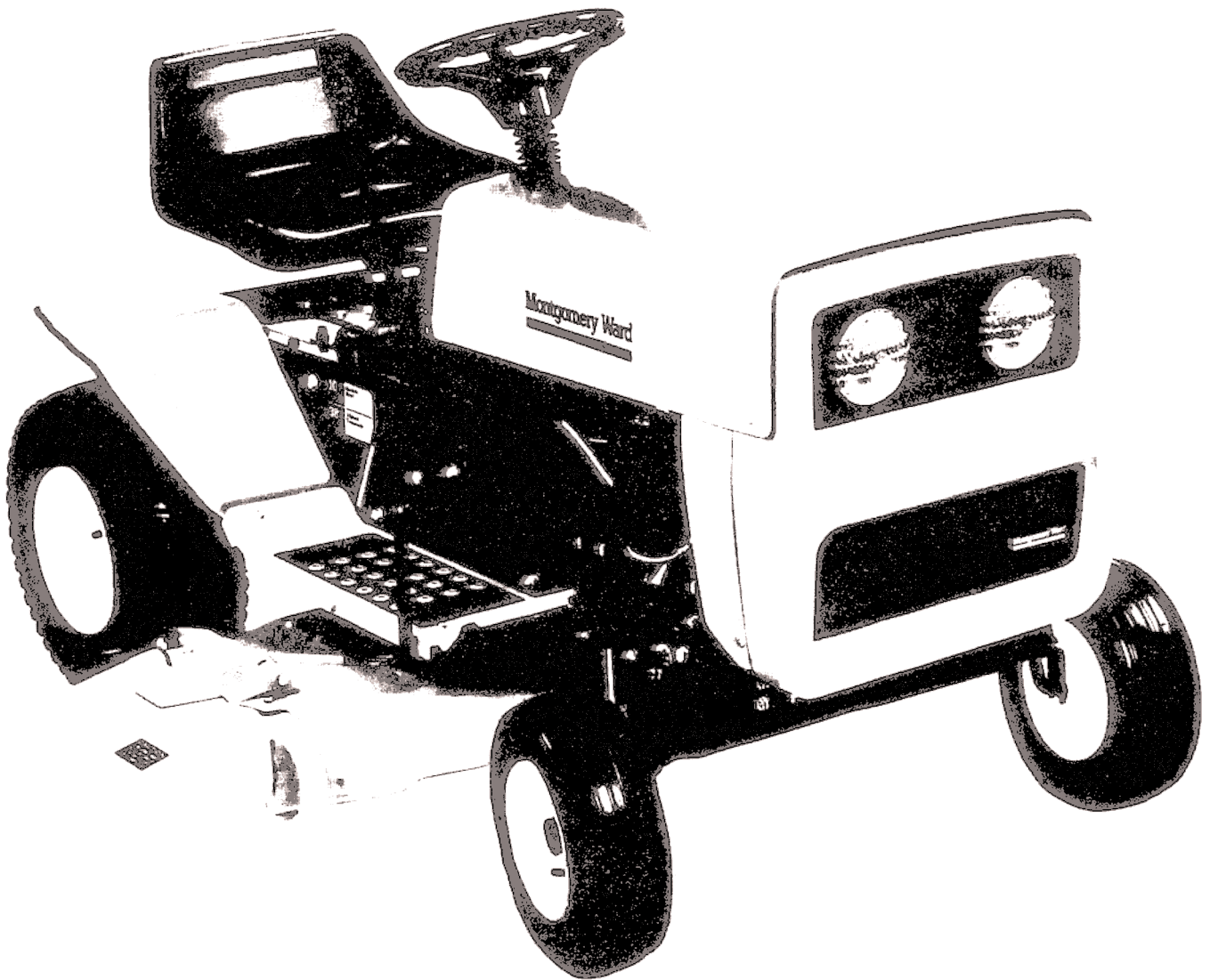


10 H.P. 38 Lawn Tractors

Operating Manual

Model Nos TMO-33902A
TMO 33886C



Montgomery Ward

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NOTICE: A data plate with the model number and serial numbers of your unit is located on the frame, under the seat. Record these numbers in the spaces provided on the back cover of this guide.

BEFORE YOU CALL SERVICE

Check Spark Plug Wire

- Firmly attached?
- Wire terminal clean?

Check Crankcase Oil Level

- Overfilled/underfilled?

Check Fuel Tank

- Fuel in tank?
- Fuel dirty or stale?
- If tank has been empty for a long period, fill tank completely.

Check Air Cleaner

- Clean?
- Choke plate stuck?
- Governor spring free to move?

Check under Blade Housing (Disconnect Spark Plug First)

- Blade obstructed or bent?

Check Starting Instructions

- Read instruction manuals and labels for specific instructions.



This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester muffler is available at your nearest engine authorized service center.



WARNING

To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

SAFE OPERATION PRACTICES FOR RIDING VEHICLES

1. Read this owner's manual carefully in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
3. Know the controls and how to stop quickly—**READ THIS OWNER'S MANUAL.**
4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
5. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
6. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
7. To prevent injury, do not carry passengers or give rides. Keep children, pets and bystanders out of the area while mowing. Only the operator should ride on the unit and only ride in the seat.
8. Check overhead clearance carefully before driving under power lines, guy wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
9. To maintain control of the unit and reduce the possibility of upset or collision, operate the tractor smoothly. Avoid erratic operation and excessive speed.
10. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidentally thrown by the mower in any direction and cause injury.
11. Clear work area of objects which might be picked up and thrown by the mower in any direction and cause injury.
12. Stop the blade(s) when crossing gravel drives, walks or roads.
13. Disengage all attachment clutches and shift into neutral before attempting to start engine.
14. Disengage power to attachment(s) and stop engine before leaving operating position.
15. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
16. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
17. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
18. Disengage power to attachment(s) when transporting or not in use.
19. Take all possible precautions when leaving vehicle unattended such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
20. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face. Use extreme caution if it is necessary to drive the tractor up an incline or back the tractor down an incline because the front of the tractor could lift and rapidly flip over backward which could cause serious injury.
21. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Always keep the tractor in gear when going down steep hills to take advantage of engine braking action.
22. Stay alert for holes in terrain and other hidden hazards.
23. Use care when pulling loads or using heavy equipment.
 - A. Use only approved drawbar hitch points.
 - B. Limit loads to those you can safely control.
 - C. Do not turn sharply. Use care when backing.
 - D. Use counterweight(s) or wheel weights when suggested in owner's manual.
24. Watch out for traffic when crossing or near roadways.
25. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
26. Handle gasoline with care. It is highly flammable.
 - A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
 - C. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.

27. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in operator's manual.
28. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
29. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
30. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
31. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
32. Do not change the engine governor settings or overspeed the engine.
33. When using the vehicle with mower, proceed as follows:
 - (1) Mow only in daylight or in good artificial light.
 - (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
 - (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
 - (4) Check blade mounting bolts for proper tightness at frequent intervals.
34. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
35. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up. Disengage blades before shifting into reverse and backing up.
36. This unit should not be driven up a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually to load properly.

NOTE

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

ASSEMBLY

NOTE

Reference to right hand or left hand side of machine is from the operating position, facing forward.

Contents of Hardware Pack: (See Figure 1)

- A (1) Steering Wheel Cap
- B (1) Belleville Washer
- C (1) Hex Nut 5/16-18 Thread
- D (1) Steering Bellow
- E (2) Ignition Keys
- F (1) Battery Cover
- G (2) Battery Hold-Down Rods
- H (2) Wing Nuts
- I (1) Cable Tie
- J (1) Clevis Pin
- K (1) Hairpin Cotter
- L (1) Lock Washer 1/2" I.D. (Not Shown)
- M (1) Hex Nut 1/2-13 Thread (Not Shown)

Loose Parts in Carton:

- (1) Battery Pack
- (1) Steering Wheel

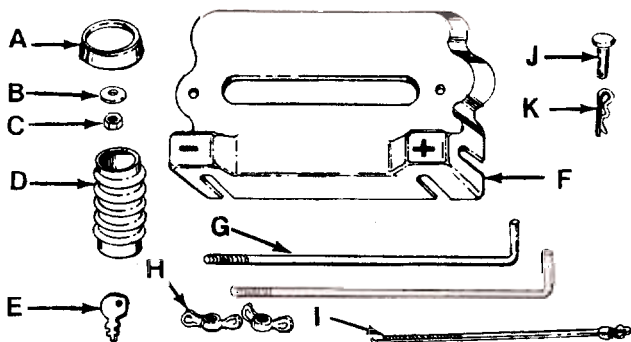


FIGURE 1.

BATTERY INFORMATION



- A. Battery acid must be handled with great care as contact with it can burn and blister the skin. It is also advisable to wear protective clothing (goggles, rubber gloves and apron) when working with it.*
- B. Should battery acid accidentally splatter into the eyes or onto the face, rinse the affected area immediately with clean cold water. If there is any further discomfort, seek prompt medical attention.
- C. If acid spills on clothing, first dilute it with clean water, then neutralize with a solution of ammonia/water or baking soda/water.

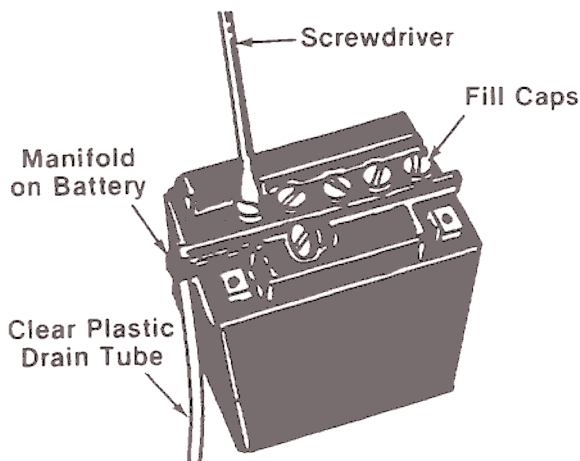


FIGURE 2.

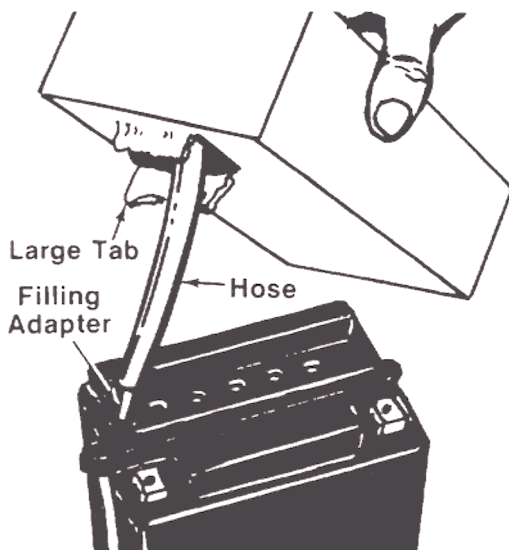


FIGURE 3.

- D. Since battery acid is corrosive, do not pour it into any sink or drain. Before discarding empty electrolyte containers, rinse them with a neutralizing solution.
- E. NEVER connect or disconnect charger clips to battery while charger is turned on as it can cause sparks.
- F. Keep all lighted materials (cigarettes, matches, lighters) away from the battery as the hydrogen gas generated during charging can be combustible.
- G. As a further precaution, only charge the battery in a well-ventilated area.

***Always shield eyes, protect skin and clothing when working near batteries.**

ACTIVATING AND INSTALLING THE BATTERY

1. Upon opening the battery pack, you should receive acid pack, battery, drain tube, filling adapter and hardware.



BATTERIES CONTAIN SULFURIC ACID AND MAY CONTAIN EXPLOSIVE GASES (when electrolyte has been added).

2. Place the battery on table or workbench to be filled.
3. Place one end of clear plastic drain tube on —manifold of battery. See figure 2.



Some batteries may already have the drain tube installed, in which case it may be necessary to snip off the sealed end.

4. Remove the six fill caps from the top of the battery with a screwdriver. Care should be taken not to damage the fill caps. See figure 2.
5. Lay acid package down, with “push in” facing up. Using thumb, push in small perforated tab at dot on front of package. Tear down large tab to solid line, exposing hose. **Do not** use any sharp object to open acid package.
6. Pull out hose from package and hold upright. Squeeze hose forcing all acid back into package. Cut off tip of hose and insert filling adapter. See figure 3.
7. Fill each cell to upper level marked on front of battery. Replace fill caps on battery. See figure 3.
8. Allow battery to sit for 20 to 30 minutes. Add additional acid, if necessary, to bring it up to the proper level.



Battery contains sulfuric acid. Refer to warning on page 5. Antidote: **EXTERNAL**—Flush with water. **INTERNAL**—Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Seek prompt medical attention. **EYES**: Flush with cool water for at least 15 minutes, then seek immediate medical attention. Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc.) away. Be sure to charge battery only in well-ventilated areas.

**KEEP BATTERIES
OUT OF THE REACH OF CHILDREN!**

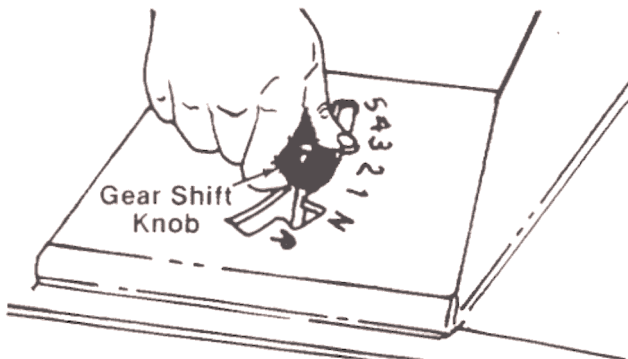


FIGURE 4.

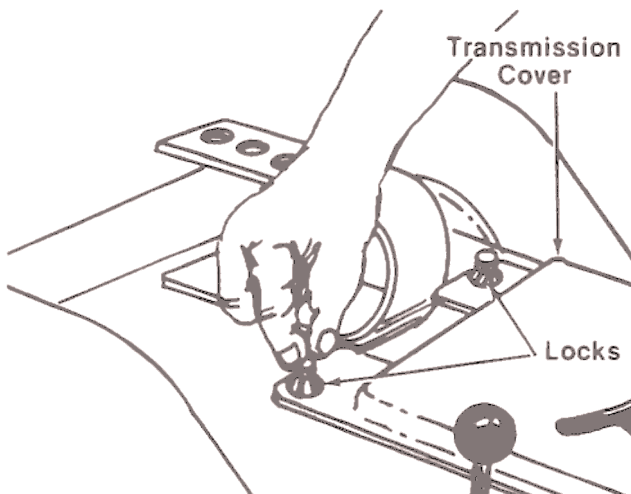


FIGURE 5.

9. The battery can be charged after the 20 minutes sitting period. **SLOW CHARGE THE BATTERY (DO NOT FAST CHARGE)** at a maximum bench rate of 1.4 amperes until the specific gravity reading is 1.260-1.280. Charge for a minimum of 2 hours and a maximum of 8 hours.

NOTE

Charging rate after battery has been put into operation: The battery is to be charged for a period of 14-16 hours. **NO LONGER THAN 30 HOURS.**

CAUTION

After battery has been in service, add only distilled water. **DO NOT ADD ACID.**

NOTE

This engine is equipped with an alternator. The current for the battery charger alternator is unregulated. During normal operation, it is only necessary to charge the battery:

1. When it is activated for the first time.
2. Before winter storage.
3. Before using the lawn tractor after winter storage.

INSTALLING THE BATTERY

1. Place gear shift lever in the "neutral" position. Unscrew the gear shift knob. See figure — 4.

2. Push down and turn the locks on the transmission cover one-quarter turn. See figure 5.

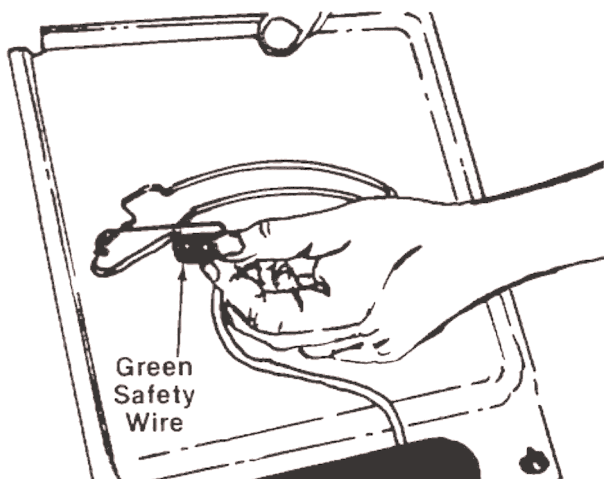


FIGURE 6.

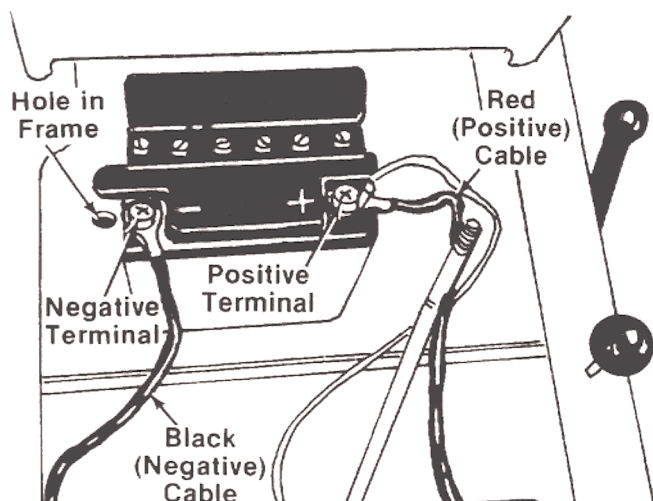


FIGURE 7.

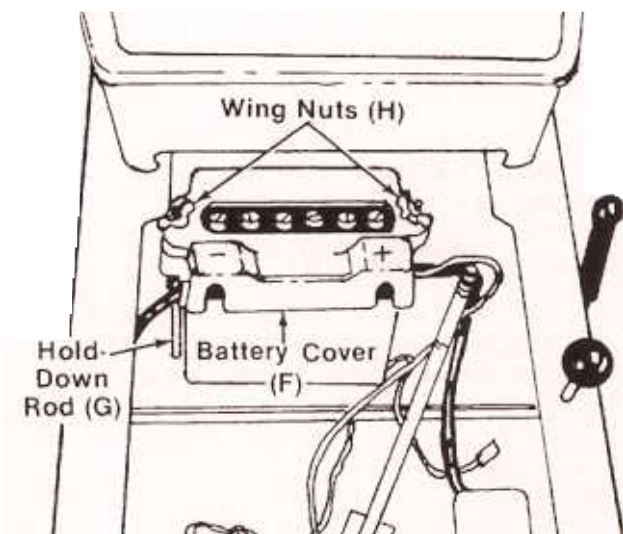


FIGURE 8.

3. Lift the transmission cover. Unplug the green safety wire from beneath the transmission —cover. See figure 6. Remove transmission cover.

4. Place the battery in the lawn tractor so that the positive terminal is facing the right side of —the unit. See figure 7.



Right and left hand sides of the unit are determined from the operating position, facing forward.

5. Slide the square nut (provided with battery hardware) into the positive (+) terminal. Place the positive (heavy red wire) cable and the small red wire on the positive terminal. Secure with screw and lock washer provided. See figure 7.
6. Slide the square nut (provided with battery hardware) into the negative (-) terminal. Place the negative (heavy black wire) cable on the negative terminal. Secure with screw and lock washer provided.
7. Hook one hold-down rod (G) into the hole in the frame beside the battery. See figure 7. Place the battery cover (F) in position over the hold-down rod. Secure with wing nut (H). Attach other hold-down rod to the other side of battery cover in the same manner. See figure —8.

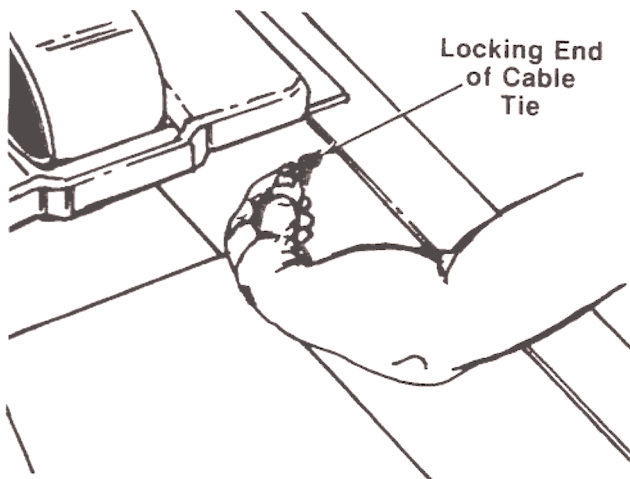


FIGURE 9.

8. Push the locking end of cable tie (I) through the hole in the left frame as shown in figure 9. Route the battery drain tube back to the cable tie. Place end of cable tie through the slot so a loop is formed around the drain tube to secure it. Tighten cable tie and cut off excess end.
9. Plug the green safety wire into the switch beneath the transmission cover. Refer to figure 6. Replace the transmission cover and gear shift knob.

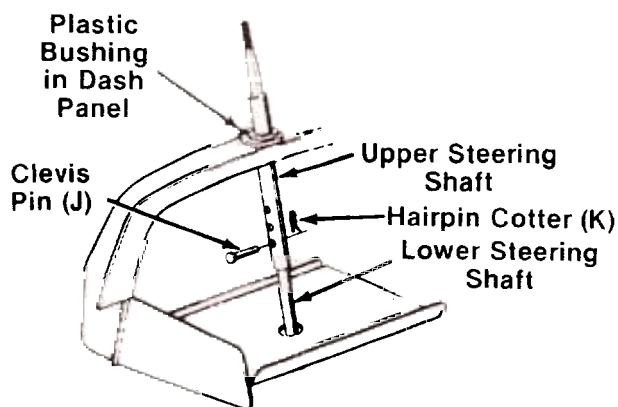


FIGURE 10.

STEERING WHEEL INSTALLATION

1. For shipping purposes, the upper steering shaft is pushed all the way down over the lower steering shaft. Pull the upper steering shaft up. The three holes in the shaft provide three steering wheel heights. Select desired hole and secure with clevis pin (J) and hairpin cotter (K). See figure 10.

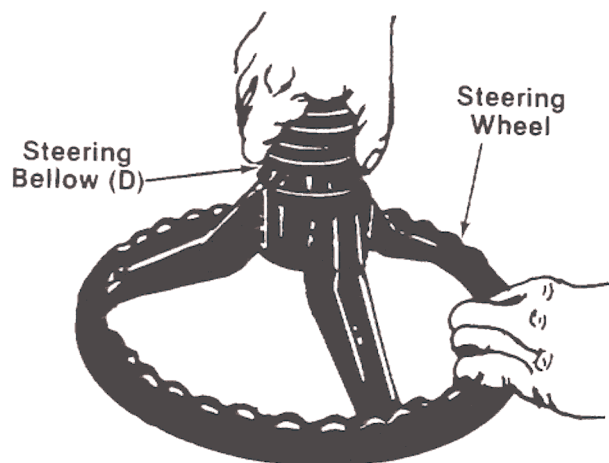


FIGURE 11.

2. Attach steering bellow (D) to the steering wheel as shown in figure 11.



One end of the steering bellow is slightly larger than the other. The larger end must be assembled to the steering wheel.

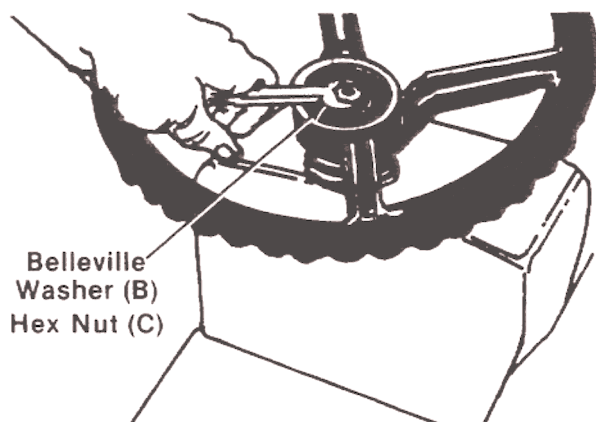


FIGURE 12.

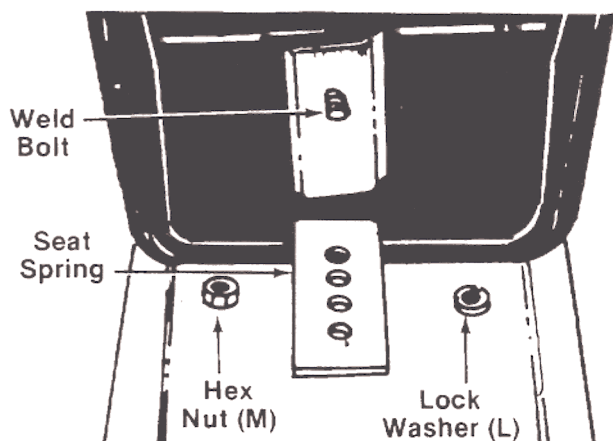


FIGURE 13.

CONTROLS

THROTTLE CONTROL

The throttle control is used to regulate the engine speed and to activate the choke on the engine. To get maximum efficiency from cutting, the throttle should be in the FAST position when operating the mower. Pushing the throttle all the way forward past FAST, will choke the engine. See figure 14.

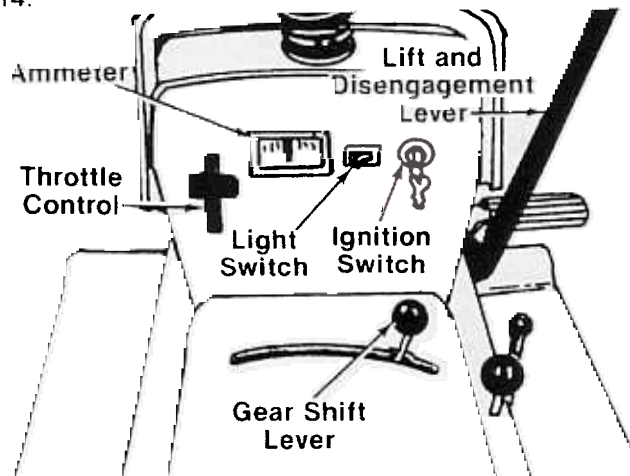


FIGURE 14.

3. Place steering wheel and bellow on the steering shaft, lining up the flats in the wheel with the flats on the shaft.
4. Secure with belleville washer (B) (cupped side against the steering wheel) and hex nut (C). — See figure 12.
5. Press the steering wheel cap (A) on the steering wheel by hand.

SEAT INSTALLATION

The seat may be adjusted to four different positions. Select desired position and secure seat to seat spring with lock washer (L) and hex nut (M). A 3/4" or adjustable wrench is required. See figure 13.

GEAR SHIFT LEVER

The gear shift lever is used to shift into one of the forward gears, "NEUTRAL" or "REVERSE." See figure 14. Model TMO-33902A has three forward gears. Model TMO-33886C has five forward gears.

IGNITION SWITCH

Turn the key to the "START" position to start the engine. When the engine is running, let the key return to the "ON" position. To stop the engine, turn the key to the left to the "OFF" position and remove it to prevent accidental starting. See figure 14.

LIGHT SWITCH

Push the light switch to turn on the lights. The lights will only operate when the engine is running. See figure 14.

AMMETER

The ammeter registers the rate of battery charge or discharge. The ammeter will register on the discharging side when starting the engine. It should register on the opposite side (charging) when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling, the ammeter will not show a charge. See figure 14.

CLUTCH-BRAKE PEDAL

The clutch-brake pedal is located on the right side of the lawn tractor. Depressing the clutch-brake pedal part way disengages the clutch. Pressing the pedal all the way down disengages the clutch and engages the disc brake. See figure 15.



The clutch-brake pedal must be depressed to start the engine.

PARKING BRAKE

To set the parking brake, depress the clutch-brake pedal and press the parking brake knob down. To release the parking brake, depress and release the clutch-brake pedal. See figure 15.

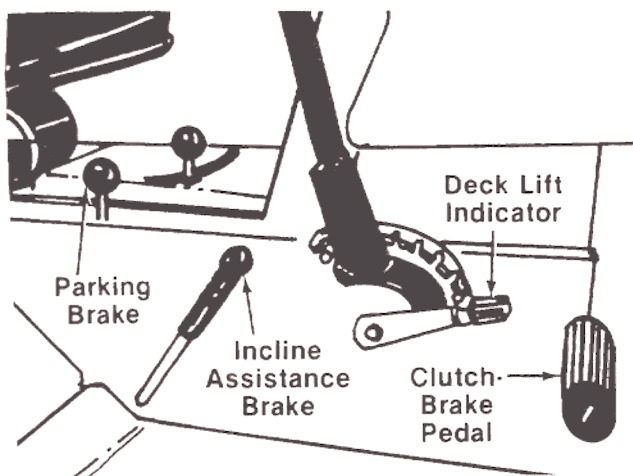


FIGURE 15.

INCLINE ASSISTANCE BRAKE

When stopping on a hill, hold the incline assistance brake lever back while you release the clutch-brake pedal until the lawn tractor begins to move, then release the lever. This lever permits smoother starts and clutch engagement by holding the tractor during the brake release/clutch engagement operation. See figure 15.

INTERLOCKS (Not Shown)

Interlock safety switches are located on the clutch-brake pedal, and the lift and disengagement lever and gear shift lever.

Before the engine will start, the clutch-brake pedal must be depressed all the way and the lift and disengagement lever must be in the disengaged position.

Before the unit can be shifted into reverse, the lift and disengagement must be in the disengaged position.

CUTTING CONTROLS

A. LIFT AND DISENGAGEMENT LEVER

The lift and disengagement lever is used to raise and lower the cutting deck. Pulling it all the way back and locking it disengages the blades. The lift and disengagement lever **must** be in the disengaged position when starting the engine and when shifting into reverse. See figure 14.

B. DECK LIFT INDICATOR

The deck lift indicator marks the position being used for the lift lever. Select the lift lever position desired, press the indicator lever outward, move it to the position immediately below the lift lever and release the indicator lever. See figure 15.

C. WHEEL HEIGHT ADJUSTER

Move the lever towards the wheel and set it in the desired height. See figure 16.

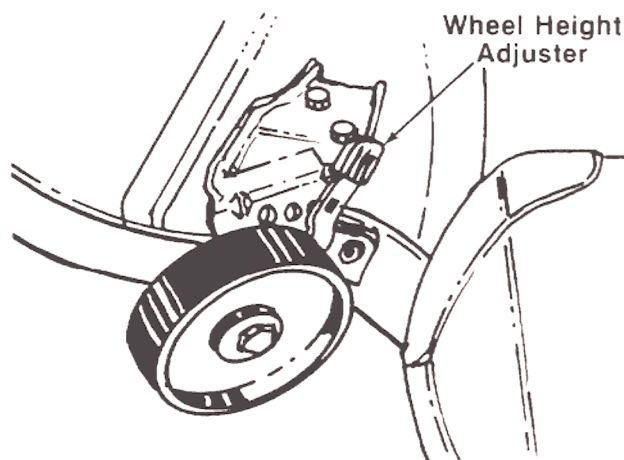


FIGURE 16.

D. SETTING THE CUTTING HEIGHT

1. Select the position for the lift lever which gives the desired cutting height. Move the deck lift indicator so that the lift lever can be returned to the same position after it is raised.
2. Set the wheel height adjusters on the deck so that the wheels are $\frac{1}{4}$ to $\frac{1}{2}$ inch above the ground.

To set the cutting deck in the suspended position, set the height of cut stop in the desired cutting height and then set the deck wheels so they just clear the ground.

OPERATION



CAUTION

1. Keep all shields in place.
2. Before leaving operator's position:
 - a. Shift transmission to neutral
 - b. Set parking brake
 - c. Disengage attachment clutch
 - d. Shut off engine
 - e. Remove ignition key
3. Wait for all movement to stop before servicing machine.
4. Keep people and pets a safe distance away from machine.
5. Look to the rear before backing up.

TIRE PRESSURE

For shipping purposes, the tires on your unit may be over-inflated. Tire pressure should be reduced before unit is put into operation. Pressure should be approximately 15 p.s.i. Equal tire pressure should be maintained on all tires. Maximum tire pressure is 30 p.s.i.

STARTING THE ENGINE



NOTE

To open the hood, simply lift up on both sides of the hood.

1. Service the engine with oil and gasoline as described in the engine manual.
2. Depress the clutch-brake pedal and set the parking brake. See figure 15.
3. Place the lift and disengagement lever in the DISENGAGED position. See figure 15.



NOTE

This unit is equipped with a safety interlock system for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch-brake pedal is depressed and the lift and disengagement lever is in the disengaged position. In addition, the lift and disengagement lever must be in the disengaged position when the unit is put into reverse or the engine will shut off.



WARNING

Do not operate the lawn tractor if the interlock system is malfunctioning because it is a safety device, designed for protection.

4. Set the throttle control in the CHOKE position. See figure 14.
5. Turn the ignition key to the "START" position. When the engine is running, let the key return to the "ON" position. See figure 14.
6. Move the throttle control to desired engine speed.

STOPPING THE ENGINE

Turn the ignition key to the left to the "OFF" position. Remove the key to prevent accidental starting.



NOTE

A brief break-in period is essential to ensure maximum engine and mower life. The break-in consists of running the engine at half speed for a period of time required to use one tank of gasoline. It is also recommended to change crankcase oil after the first 5 hours of operation.



IMPORTANT

If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the unit for any damage, and repair the damage before restarting and operating the mower.

OPERATING THE MOWER

1. Set the desired cutting height.
2. Start the engine as instructed on page 11.
3. Move throttle control to desired engine speed.
4. Depress the clutch-brake pedal and shift into first gear or reverse.
5. Release clutch-brake pedal slowly to put unit into motion.
6. Depress the clutch-brake pedal when shifting gears.



NOTE

Do **not** force the gear shift lever!

7. The lawn tractor is brought to a stop by depressing the clutch-brake pedal. The drive belt will be disengaged and the brake will be applied.



CAUTION

If the unit is not to be used for a long period, place the gear shift lever in NEUTRAL, stop the engine, set the parking break and remove the key. DO NOT leave the machine on an incline.



NOTE

Under normal usage bag material is subject to wear, and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag No. 764-0121.

OPERATING THE CUTTING BLADES

The cutting blades may be engaged while the lawn tractor is moving or standing still. DO NOT engage the cutting blades abruptly as the sudden belt tension on the pulley may cause the engine to stall.



WARNING

When the blade drive is engaged, keep feet and hands away from the discharge opening, the blades or any part of the deck.

Move the lift and disengagement lever into the DISENGAGED position to raise the deck and disengage the blades.



NOTE

When the machine is used for other than mowing operations, the blade drive should be disengaged.

GRASS CATCHER Part No. 194-015-088 is available as optional equipment for the lawn tractor shown in this manual.



WARNING

The mower should not be operated without the entire grass catcher or chute deflector in place.

ADJUSTMENTS

SEAT ADJUSTMENT

The seat may be adjusted to one of four positions. Remove hex nut and lock washer from under seat spring.

After desired seat location is selected, secure seat to seat spring with lock washer and hex nut. A 3/4" or adjustable wrench is required. See figure 17.

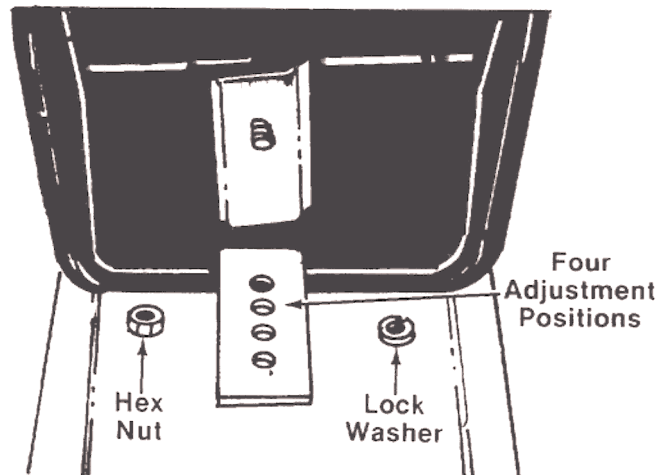


FIGURE 17.

STEERING WHEEL ADJUSTMENT

There are three height positions for the steering wheel. To adjust the height of the steering wheel, remove the hairpin cotter and clevis pin shown in figure 18. Place the steering wheel in the position desired and secure with hairpin cotter and clevis pin.

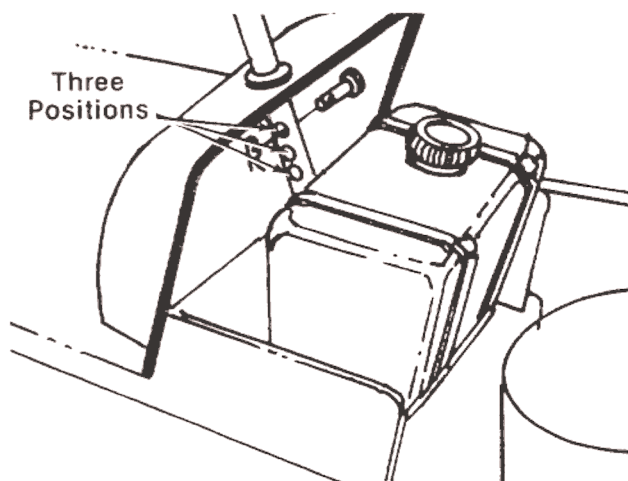


FIGURE 18.
WHEEL ADJUSTMENT

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) require no adjustment. Automotive steering principles have been used to determine the caster and camber on the tractor. The front wheels should toe-in 1/8 inch.

To adjust the toe-in, follow these steps.

1. Remove the hex nut and lock washer, and drop the tie rod end from the wheel bracket. See figure 19.
2. Loosen the hex jam nut on tie rod.
3. Adjust the tie rod assembly for correct toe-in.

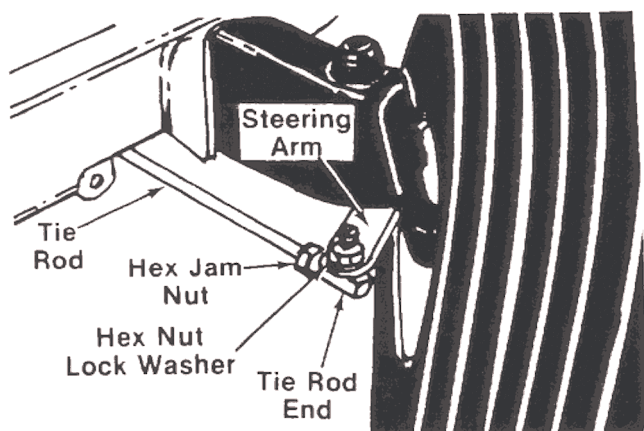


FIGURE 19.

Dimension "B" should be approximately 1/8" less than Dimension "A." See figure 20.

- A.) To increase Dimension "B," screw tie rod into tie rod end.
- B.) To decrease Dimension "B," unscrew tie rod from tie rod end.
- C.) Reassemble tie rod. Check dimensions. Readjust if necessary.

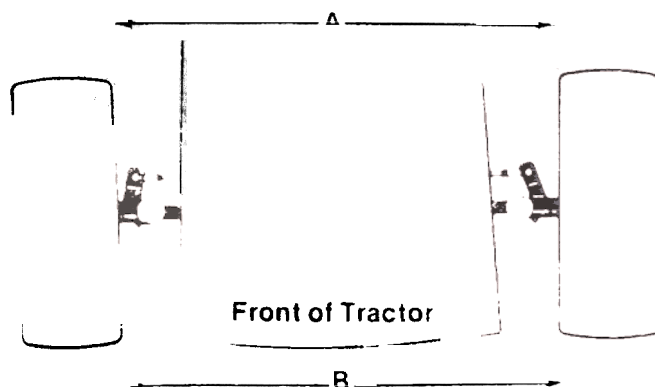


FIGURE 20. TOE-IN DIAGRAM

CARBURETOR ADJUSTMENT



If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches, and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude and load. To adjust the carburetor, refer to the separate engine manual packed with your unit.

BRAKE ADJUSTMENT

During normal operation of this machine, the brake is subject to wear and will require periodic examination and adjustment.



Do not have the engine running when you adjust the brake.

To adjust the brake, proceed as follows.

1. Tighten the inside nut until the cam lever can not be moved by hand.
2. Loosen the inside nut until the cam lever can be pushed forward so that there is a 1/8" to 3/16" space between the cam lever and stop bolt. See figure 21.

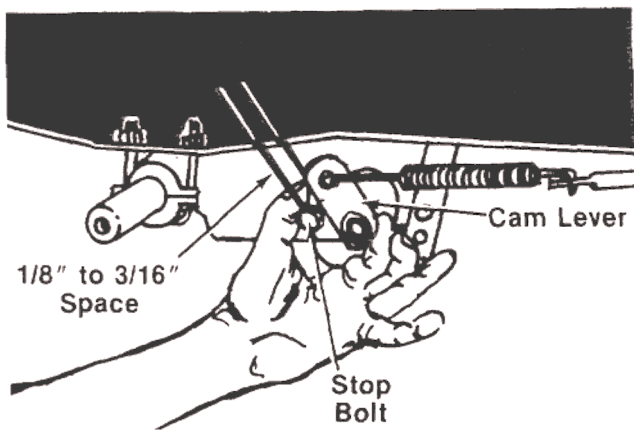


FIGURE 21.

3. Tighten the outside nut against the inside nut, using two 1/2" wrenches. See figure 22.



Friction pads must be replaced when the inside of cam lever touches the housing.

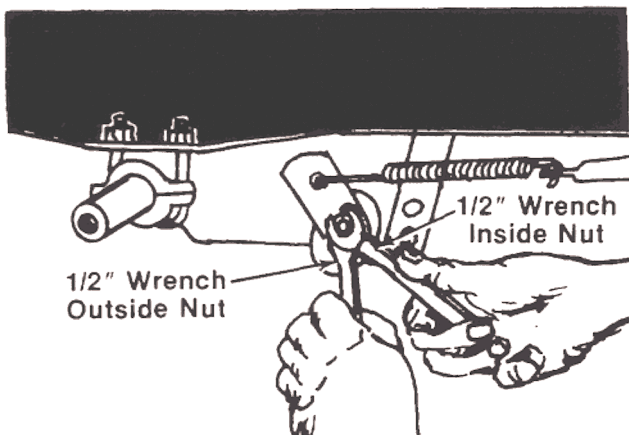


FIGURE 22.

LUBRICATION

STEERING GEARS

Lubricate teeth of steering gears with automotive multi-purpose grease after every 25 hours of operation or once a season. See figure 23.

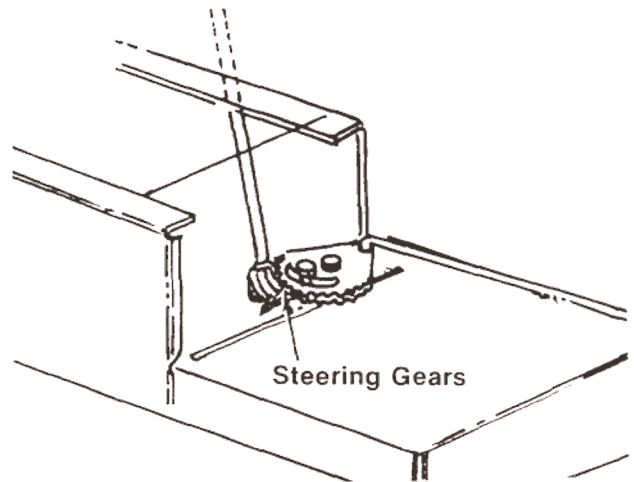


FIGURE 23.

STEERING SHAFT

Lubricate steering shaft at least once a season with light oil.

TRANSAXLE

The transaxle is lubricated and sealed at the factory and does not require checking. If disassembled for any reason, lubricate with 24 oz. of E.P. Lithium grease.

FRONT WHEELS

The front wheels are provided with grease fittings. Lubricate at least once a season with automotive multi-purpose grease.

PIVOT POINTS

Lubricate all pivot points with light oil at least once a season.

MAINTENANCE



WARNING

Disconnect the spark plug wire and ground against the engine before performing any repairs or maintenance.

CRANKCASE OIL

Check the oil level in the crankcase before each use of the machine and after every five hours of operation. Oil level should be maintained as instructed in the separate engine manual.

After the first five hours of operating a new engine, drain the oil from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil every 25 hours of operation. Refer to the engine manual.

AIR CLEANER

Under normal operating conditions, the air cleaner, located on top of the carburetor, must be serviced after every ten hours of use. Under extremely dusty operating conditions, the air cleaner must be serviced after every hour of operation. To service the air cleaner, refer to the separate engine manual packed with your unit.

CLEANING ENGINE AND BLADE HOUSING

Any fuel or oil spilled on the machine should be wiped off promptly. Grass, leaves, and other dirt must not be left to accumulate around the cooling fins of the engine or on any part of the machine.

Clean the underside of the blade housing after each mowing.

SPARK PLUG

The spark plug should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type and gap specification.

CUTTING BLADE

A. Removal for Sharpening or Replacement



Be sure to disconnect and ground the spark plug wire and remove ignition key before working on the cutting blade to prevent accidental engine starting.

1. Remove the large bolt and lock washer which holds the blade and adapter to the blade spindle.
2. Remove the blade and adapter from the spindle. Be careful not to lose the key on the spindle.
3. If the blade or blade adapter needs replacing, remove the two small bolts, lock washers and nuts which hold the blade to the adapter.

B. Sharpening

Remove the cutting blade by following the directions of the preceding section.

When sharpening the blade, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds, may cause damage to the mower and could break, causing personal injury.

The blade can be tested for balance by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.



It is recommended that the blade always be removed from the adapter for the best test of balance.

C. Reassembly

Before reassembling the blade and the blade adapter to the unit, lubricate the spindle and the inner surface of the blade adapter with light oil. Lubricating the bolt holes, bolts and inner surface of the nuts with light oil is also recommended. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

When replacing the blade, be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position. Make certain key is in place on the crankshaft.

Blade Mounting Torque

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max.

5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

FUEL FILTER

Your unit is equipped with a replaceable in-line fuel filter. Replace filter whenever contamination or discoloration is noticed. Order replacement filter through your engine authorized service dealer.

BELT REMOVAL AND REPLACEMENT



Disconnect the spark plug wire and ground it against the engine.



Figures 24 through 28 are shown with the unit tipped up for clarity. It is not necessary to tip the unit to remove the belts.

Removing the Deck Belt

1. Place the lift lever in the disengaged position.
2. Remove the two hex bolts (belt keepers) from the engine pulley belt guard. See figure 24.

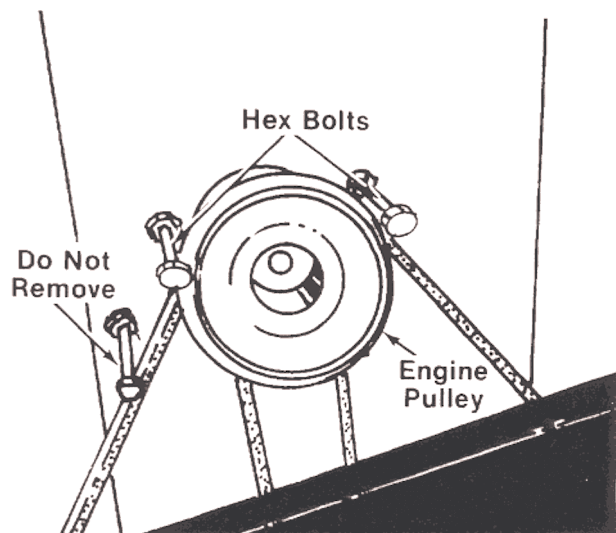


FIGURE 24.

3. Unhook the deck belt from the engine pulley.
4. Place the lift lever in the engaged (all the way forward) position.
5. Disconnect the six deck links by removing the hairpin cotters and flat washers.
6. Slide the deck from beneath the lawn tractor.
7. Remove the belt guards at each deck pulley by removing the hex bolts, lock washers and hex nuts. See figure 25.
8. Remove and replace the belt, following the instructions in reverse order.

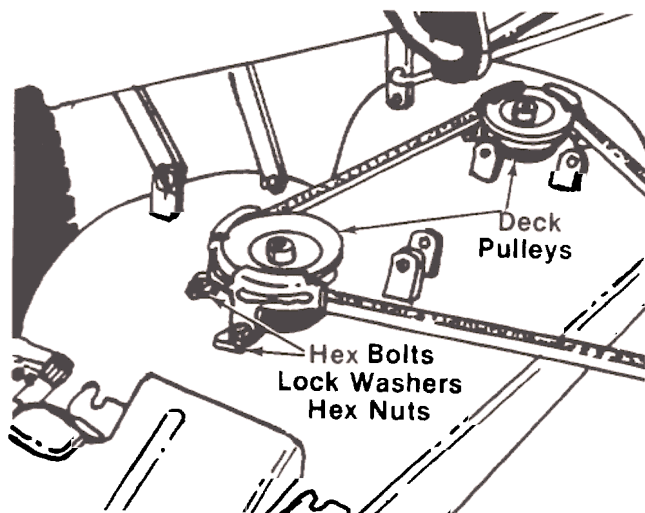


FIGURE 25.

Removing the Drive Belt

1. Follow steps 1 through 3 on removing the deck belt.
2. Remove the two bolts, lock washers and nuts on each side of the frame which hold the engine pulley belt guard to the frame. See figure 26.

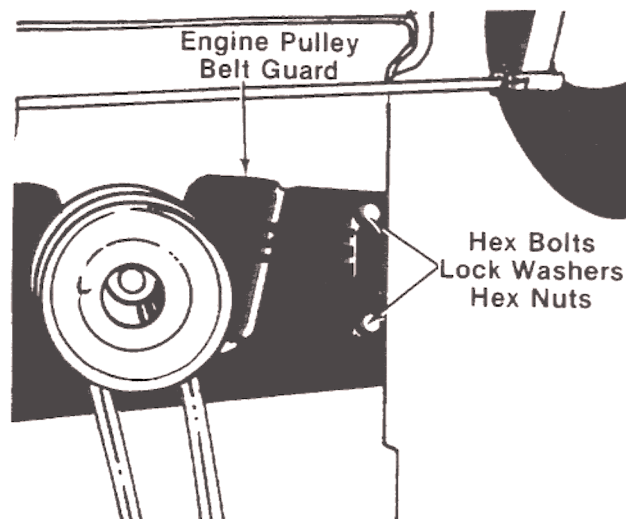


FIGURE 26.

3. Remove the engine pulley belt guard by slipping it back and to the right. See figure 27.

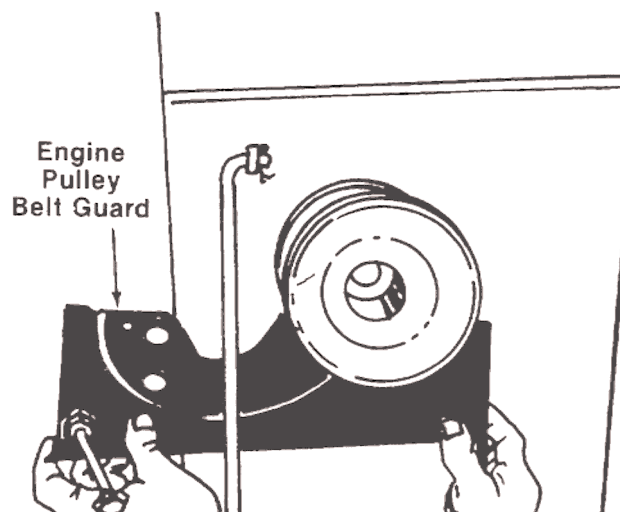


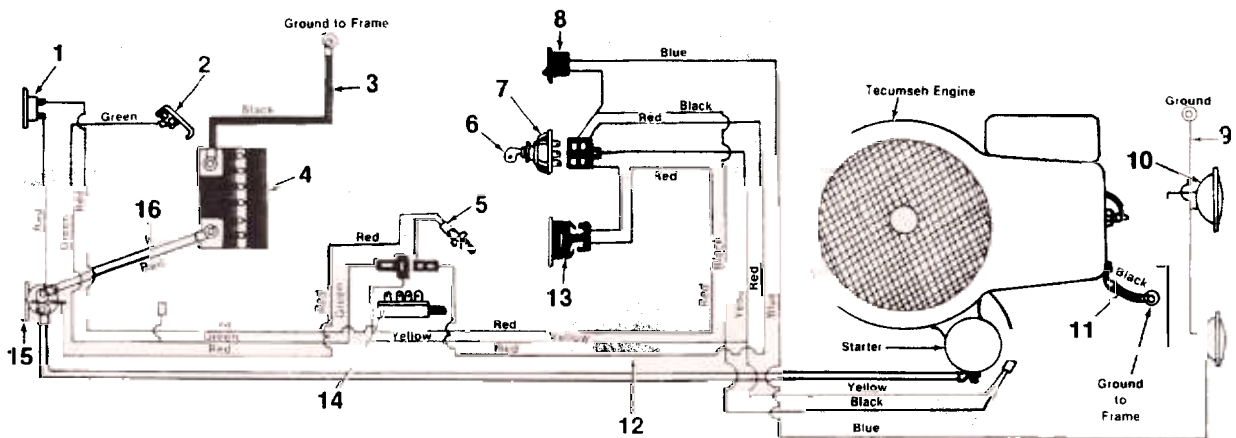
FIGURE 27.

4. Remove the bolt, lock washer and nut which hold the idler pulley to the idler bracket. See figure 28.



Upon reassembly, the hub side of the idler pulley must be assembled against the idler bracket.

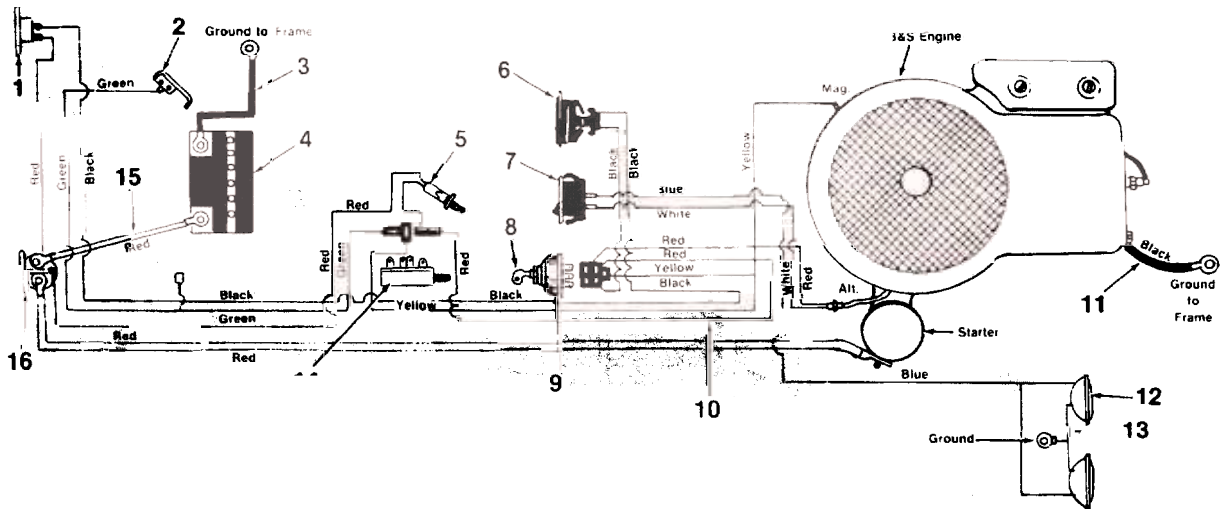
TMO-33902A



PARTS LIST FOR ELECTRICAL SYSTEM MODEL TMO-33902A

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	725-0459	Circuit Breaker	9	725-0916	Ground Wire
2	725-0759	Spring Switch (Reverse Safety)	10	725-0222	Head Light
3	725-0975	Ground Wire 9.0" Lg. (Black Neg.)	11	725-0976	Ground Wire 7.25" Lg. (Black)
4	725-0514	12 Volt Battery	12	725-1042	Wire Harness
5	725-0577	Safety Switch (Clutch)	13	725-0925	Ammeter
6	725-0201	Ignition Key	14	725-0803	Safety Switch (P.T.O.)
7	725-0267	Ignition Switch	15	725-0771	Solenoid
8	725-0634	Light Switch	16	725-0150	Electric Wire (Red Pos.)

TMO-33886C

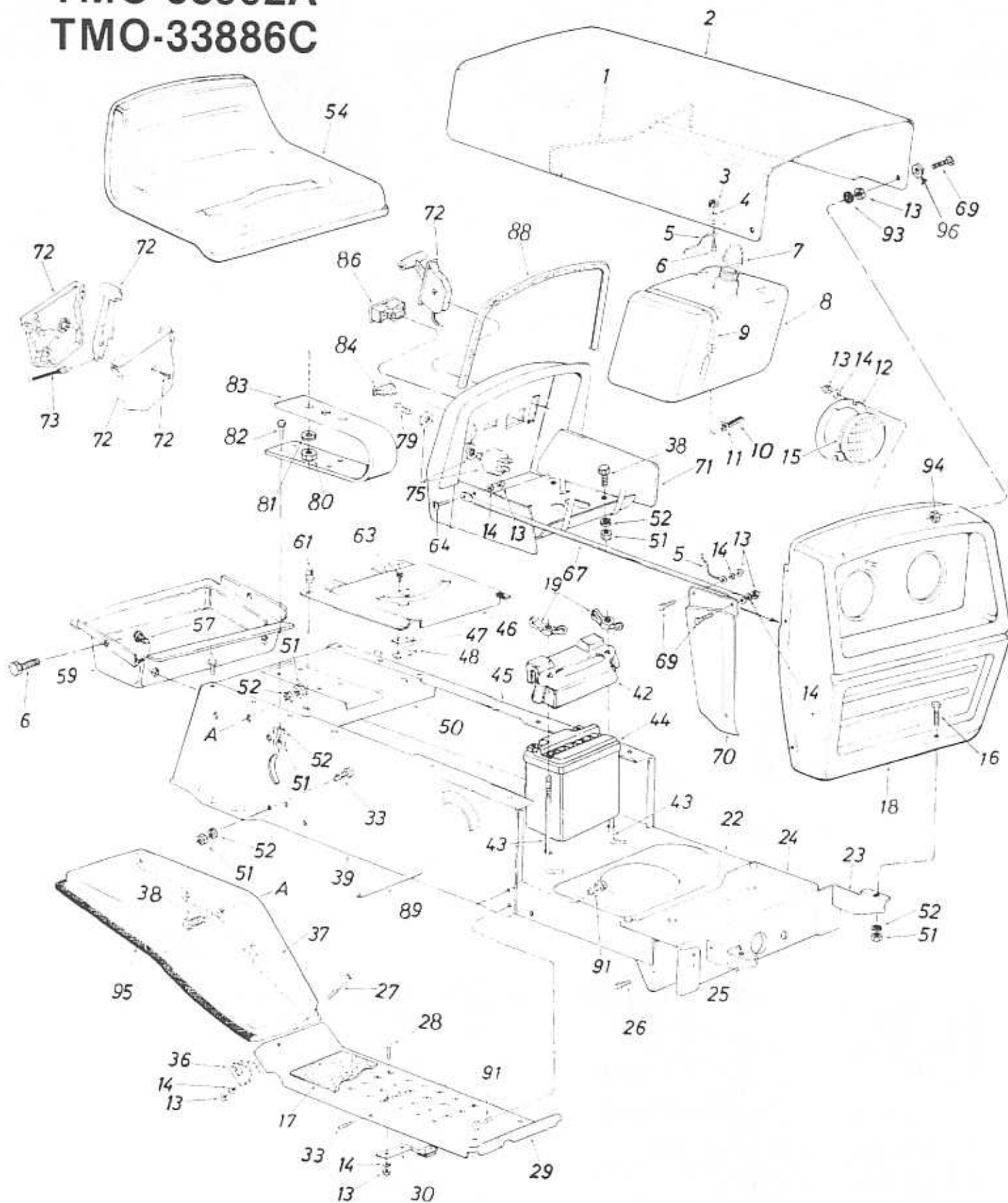


PARTS LIST FOR ELECTRICAL SYSTEM MODEL TMO-33886C

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	725-0459	Circuit Breaker	9	725-0267	Ignition Switch
2	725-0759	Spring Switch (Reverse Safety)	10	725-0970	Wire Harness
3	725-0975	Ground Wire 9.0" Lg. (Black Neg.)	11	725-0976	Ground Wire 7.25" Lg. (Black)
4	725-0514	12 Volt Battery	12	725-0222	Headlight
5	725-0577	Safety Switch (Clutch)	13	725-0916	Ground Wire
6	725-0925	Ammeter	14	725-0803	Safety Switch (P.T.O.)
7	725-0634	Headlight Switch	15	725-0150	Electric Wire (Red Pos.)
8	725-0201	Ignition Key	16	725-0771	Solenoid

TMO-33902A

TMO-33886C



TMO-33902A

TMO-33886C

10 H.P. 38" LAWN TRACTORS PARTS LIST FOR MODELS TMO-33902A AND TMO-33886C

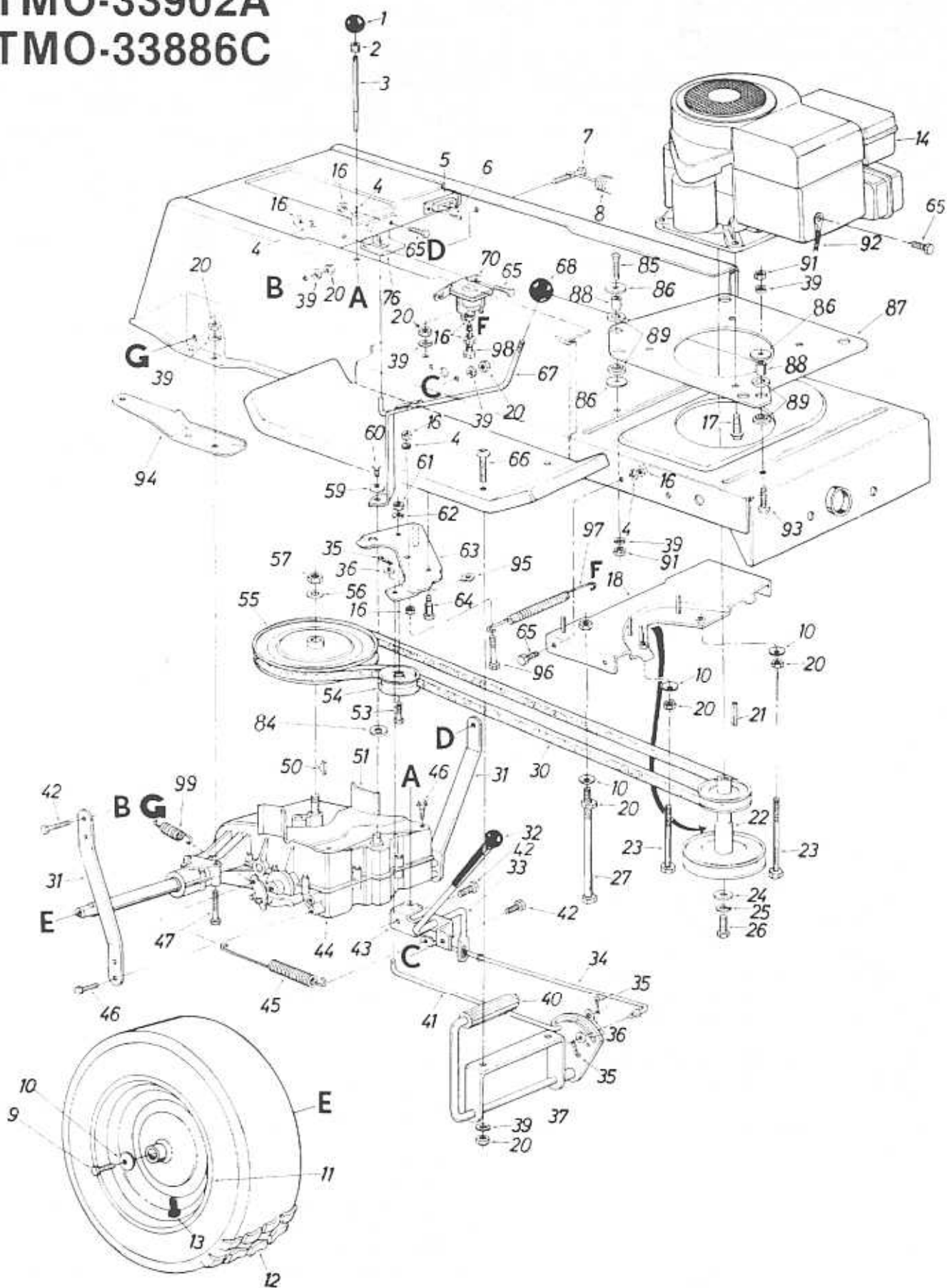
REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	732-0414	Hood Spring	48	726-0222	Insulator Nut Plate
2	14665 —615	Hood	50	14607	Hitch Plate
3	712-0272	Hex Sems Nut #10-24 Thd.*	51	712-0267	Hex Nut 5/16-18 Thd.*
4	736-0463	Fl-Wash. .281" I.D. x .62" O.D. x .051	52	736-0119	L-Wash. 5/16" I.D.*
5	723-0302	Hood Stop 7" Lg.	54	757-0264	Seat Ass'y.
6	710-0473	Truss Hd. Scr. #10-24 x 1/2" Lg.*	57	710-0726	Hex Wash. Hd. AB-Tap Scr. 5/16 x .62" Lg.
7	723-0155	Fuel Cap Gauge	59	731-0561	Tool Tray
8	751-0172	Fuel Tank	61	726-0151	Fastener
9	726-0153	Tie Strap	63	710-0227	Truss Hd. Scr. #8 x .50" Lg.
10	751-0173	Fuel Line	64	710-0258	Hex Bolt 1/4-20 x .62" Lg.*
11	726-0207	Hose Clamp	67	749-0517	Grille Support Rod (R.H. & L.H.)
12	09960	Headlight Retainer	69	710-0255	Truss Hd. Scr. 1/4-20 x .75" Lg.*
13	712-0287	Hex Nut 1/4-20 Thd.*	70	14748	R.H.—Grille Side Panel
14	736-0329	L-Wash. 1/4" I.D.*		14749	L.H.—Grille Side Panel
15	725-0222	Headlight	71	15933	Dash Panel Ass'y.
16	710-0118	Hex Bolt 5/16-18 x .75" Lg.*	72	831-0692	Throttle Control Box Ass'y.
17	723-0360	Foot Pad	73	746-0500	Throttle Control Wire (TMO-33902A)
18	14781 —615	Grille Ass'y.		746-0504	Throttle Control Wire (TMO-33886C)
19	712-0113	Wing Nut 1/4-20 Plastic	75	725-0267	Ignition Switch
22	14606	Lower Frame	79	725-0201	Ignition Key
23	13863	Grille Mount Brkt.—L.H.	80	712-0206	Hex Nut 1/2-13 Thd.*
24	14619	Front Pivot Brkt.	81	736-0921	L-Wash. 1/2" I.D.*
25	13862	Grille Mount Brkt.—R.H.	82	710-0376	Hex Bolt 5/16-18 x 1.00" Lg.*
26	710-0726	Hex Wash. Hd. AB-Tap Scr. 5/16 x .75" Lg.	83	732-0354	Seat Spring
27	710-0524	Truss Hd. Scr. 1/4-20 x 1.75" Lg.*	84	725-0634	Light Switch
28	710-0134	Carriage Bolt 1/4-20 x .62" Lg.*	86	725-0925	Ammeter
29	14604 —615	Running Board (R.H. & L.H.)	88	731-0511	Molding Strip 27" Lg.
30	761-0169	Blade Brake Ass'y.	89	738-0526	Running Board Rod
33	710-0323	Truss Mach. Scr. 5/16-18 x .75" Lg.*	90	712-0287	Hex Nut 1/4-20 Thd.*
36	14671	Fender Clamp	91	710-0621	Hex Bolt 5/16-18 x .75" Lg.*
37	14655	Fender (R.H. & L.H.)	93	735-0144	Rubber Wash. 1/2" I.D. x 1.0" O.D.
38	710-0118	Hex Bolt 5/16-18 x .75" Lg.*	94	712-0324	Hex Sems Ins. L-Nut 1/4-20 Thd.
39	14602	R.H. Side Frame	95	757-0272	Trim Strip
42	731-0708	Battery Cover	96	736-0463	Fl-Wash. .296 I.D. x .62" O.D.
43	711-0222	Battery Hold Down Rod			
44	725-0514	12-V Battery			
45	14603	L.H. Side Frame			
46	15823	Transmission Panel			
47	725-0759	Reverse Safety Switch			

*Common Hardware—May be purchased locally.
Important: **Do not** order by reference number (Ref. No.).
NOTE: Specifications subject to change without notice or obligation.

Part No.	Description
788-0615	Red Spray Paint
788-0452	Black Spray Paint
788-0312	White Spray Paint
777-3788	Label—Side of Hood
777-3722	Label—Grille
777-3730	Label—Steering Cap
777-3797	Label—Side of Frame (TMO-33886C)
777-4841	Label—Side of Frame (TMO-33902A)
770-3439	Operating Manual

TMO-33902A

TMO-33886C



TMO-33902A

TMO-33886C

10 H.P. 38" LAWN TRACTORS

PARTS LIST FOR MODELS TMO-33902A AND TMO-33886C

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	720-0187	Ball Knob 1.25" O.D. x 1/4-20 Thd.	43	14634	Brake Lock and Handle Support Brkt.
2	732-0145	Compression Spring .30" O.D. x 1.00" Lg.	44	—	Transaxle Complete
3	711-0742	Brake Lockout Rod	45	732-0413	Ext. Spring .590" O.D. x 7.08" Lg.
4	736-0329	L-Wash. 1/4" I.D.*	46	710-0604	Hex Wash. Hd. AB-Tap Scr. 5/16 x .62" Lg.
5	725-0459	Circuit Breaker	47	710-0378	Hex Bolt 5/16-18 x 2.50" Lg.*
6	710-0351	Truss Hd. Phil. Scr. #10 x 1/2" Lg.	50	714-0129	#4 Hi-Pro Key 3/32 x 5/8" Dia.
7	710-0528	Hex Bolt 5/16-18 x 1.25" Lg.	51	14631	Transaxle Belt Keeper
8	732-0307	Ext. Spring .99" O.D. x 11.00" Lg.	53	710-0344	Hex Bolt 3/8-16 x 1.50" Lg.*
9	710-0627	Hex Bolt 5/16-24 x .75" Lg.*	54	756-0225	Flat Idler Pulley 3/8" I.D. x 2.75 O.D.
10	736-0242	Bell-Wash. 5/16" I.D.	55	756-0374	Transaxle Pulley
11	**	Rear Wheel Rim Only	56	736-0921	L-Wash. 1/2" I.D.*
12	**	Rear Wheel Ass'y. Comp.	57	712-0922	Hex Nut 1/2-20 Thd.*
13	734-0255	Air Valve (Service Only)	59	736-0270	Bell-Wash. .26" I.D. x .75" O.D.
14	—	Engine—B&S 220707-0641 (TMO-33886C)	60	710-0513	Hex Bolt 1/4-28 x .62" Lg.
	—	Engine—Tec. TVM220-157057 (TMO-33902A)	61	712-0798	Hex Nut 3/8-16 Thd.*
16	712-0287	Hex Nut 1/4-20 Thd.*	62	736-0169	L-Wash. 3/8" I.D.*
17	710-0502	Hex Self-Tap Scr. 3/8-16 x 1.25" Lg. (TMO-33886C)	63	14656	Idler Brkt. Ass'y.
	710-0650	Hex Wash Hd TT-Tap Screw 5/16-18 x .88" (TMO-33902A)	64	738-0140	Shld. Scr. .437" Dia. x 1.80" Lg. (5/16-18)
18	14643	Belt Guard Brkt. Ass'y.	65	710-0258	Hex Bolt 1/4-20 x .62" Lg.*
20	712-0267	Hex Nut 5/16-18 Thd.*	67	14627	Shift Lever Ass'y.
21	714-0114	Sq. Key 1/4" x 1/4" x 2.00" Lg.	68	720-0165	Ball Knob 1.25" O.D. x 3/8-16 Thd.
22	756-0373	Two Step Engine Pulley	70	725-0771	Solenoid
23	710-0833	Hex Bolt 5/16-18 x 5.25" Lg.	76	14630	Shift Lever Pivot Brkt.
24	736-0322	Fl-Wash. 7/16" I.D. x 1.25" O.D. x .180	84	717-0234	Special Wash. 1.00" O.D.
25	736-0171	L-Wash. 7/16" I.D.*	85	710-0158	Hex Bolt 5/16-24 x 1.25" Lg.*
26	710-0757	Hex Bolt 7/16-20 x 1.50" Lg.	86	736-0343	Fl-Wash. 1.25" O.D. x .320" I.D.
27	710-0833	Hex Bolt 5/16-18 x 5.25" Lg.*	87	14791	Engine Mounting Plate
30	754-0266	"V"-Belt "A" Glass 85" Lg. Bare Back	88	750-0539	Spacer
31	14653	Transaxle Brace	89	722-0153	Engine Mounting Grommet
32	720-0143	Grip (Hand Brake)	91	712-0123	Hex Nut 5/16-24 Thd.*
33	747-0386	Hill Holder Brake Handle	92	725-0122	Electric Ground Wire
34	747-0385	Brake Rod	93	710-0624	Hex Bolt 5/16-24 x 1.50" Lg.*
35	714-0111	Cotter Pin 3/32" Dia. x 1.00" Lg.*	94	14770	Transaxle Support Brkt.—R.H.
36	736-0204	Fl-Wash. .344" I.D. x .625" O.D.		14769	Transaxle Support Brkt.—L.H. (Not Shown)
37	14623	Brake and Clutch Pedal Ass'y.	95	736-0141	Wave Wash.
39	736-0119	L-Wash. 5/16" I.D.*	96	710-0102	Hex Bolt 1/4-20 x 2.50" Lg.*
40	735-0196	Foot Pedal Pad	97	732-0384	Ext. Spring
41	747-0390	Clutch Rod	98	710-0102	Hex Bolt 1/4-20 x 2.50" Lg.*
42	710-0118	Hex Bolt 5/16-18 x .75" Lg.*	99	732-0303	Brake Return Spring

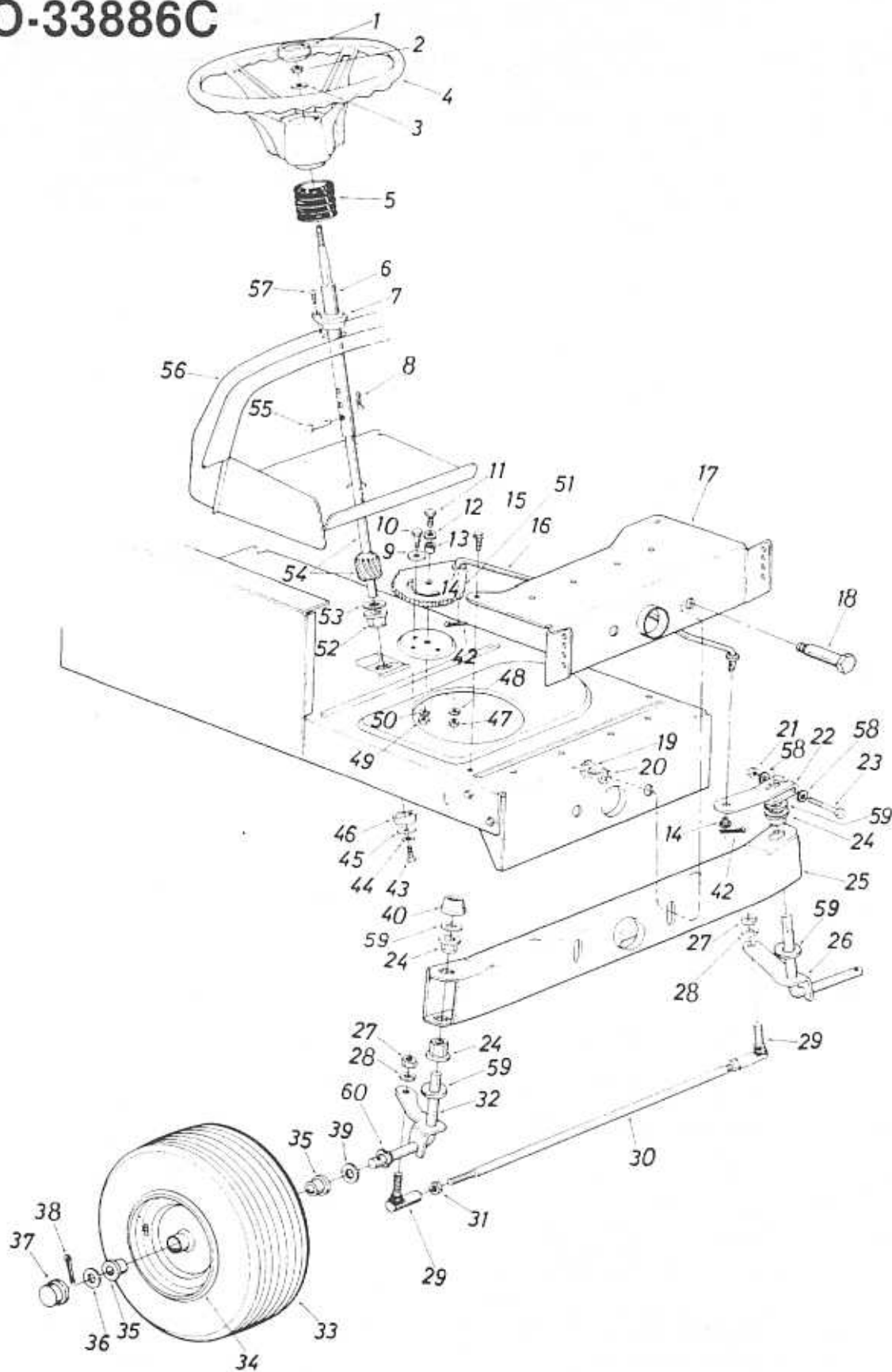
*Common Hardware—May be purchased locally. Important: **Do not** order by reference number (Ref. No.)

**Rear Wheel Chart

Description	18 x 6.5 (TMO-33902A)	18 x 8.5 (TMO-33886C)
Wheel Ass'y. Complete	734-1132	734-0601
Rim Only	734-1133	734-0603
Tire Only	734-0294	734-0516

TMO-33902A

TMO-33886C



TMO-33902A

TMO-33886C

10 H.P. 38" LAWN TRACTORS

PARTS LIST FOR MODELS TMO-33902A AND TMO-33886C

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	731-0220	Steering Wheel Cap	31	712-0711	Hex Jam Nut 3/8-24 Thd.*
2	712-0267	Hex Nut 5/16-18 Thd.*	32	15840	Front Axle Ass'y.—R.H.
3	736-0242	Belleville Wash. .345" I.D.	33	**	Wheel Ass'y. Comp.
4	731-0219	Steering Wheel	34	**	Front Wheel Rim Only
5	731-0559	Steering Column Bellow	35	741-0313	Bearing
6	14775	Steering Column Ass'y.	36	736-0285	FI-Wash. .635 I.D. x 1.59" O.D.
7	741-0356	Flange Bearing .890 I.D. x 1.36 O.D.	37	731-0484	Front Wheel Hub Cap
8	714-0147	Internal Cotter Pin 1/4" Dia.	38	714-0470	Cotter Pin 1/8" Dia. x 1.25" Lg.*
9	736-0319	FI-Wash. .438" I.D. x 1.37" O.D.	39	736-0156	FI-Wash. .635" I.D. x 1.20" O.D.
10	738-0141	Shoulder Bolt .437" Dia. x .35 Lg. 5/16-18 Thd.	40	726-0214	Push Cap 5/8" Dia. Rod
11	710-0152	Hex Bolt 3/8-24 x 1.0" Lg. (Grade 5)	42	714-0115	Cotter Pin 1/8" Dia. x 1.0" Lg.
12	736-0206	FI-Wash. .38" I.D. x 1.0" O.D.	43	710-0538	Hex L-Bolt 5/16-18 x .62" Lg.*
13	750-0535	Spacer .380" I.D. x .625" O.D. x .227	44	736-0119	L-Wash. 5/16" I.D.*
14	731-0658	Bushing	45	736-0231	FI-Wash. .344" I.D. x 1.25" O.D.
15	710-0726	Hex Wash. Hd. Self-Tap Scr.	46	750-0532	Spacer (Plastic)
16	711-0691	Steering Drag Link	47	712-0241	Hex Nut 3/8-24 Thd.*
17	14619	Front Pivot Brkt.	48	736-0169	L-Wash. 3/8" I.D.*
18	738-0527	Shoulder Bolt .498" Dia. x 2.04 Lg. 3/8-16 Thd.	49	712-0267	Hex Nut 5/16-18 Thd.*
19	712-0798	Hex Nut 3/8-16 Thd.*	50	736-0119	L-Wash. 5/16" I.D.*
20	736-0169	L-Wash. 3/8" I.D.*	51	717-0468	Steering Gear Segment
21	712-0237	Hex Cent. L-Nut 5/16-24 Thd.	52	741-0225	Hex Flg. Brg. .634 I.D.
22	14611	Steering Arm Front Axle	53	736-0187	FI-Wash. (Hardened)
23	710-0772	Hex Bolt 5/16-24 x 2.00" Lg. (Grade 5)	54	738-0522	Steering Shaft Lower
24	741-0225	Hex Flg. Brg. .634 I.D.	55	711-0684	Clevis Pin 1/4" Dia. x 1.00" Lg.
25	14608	Pivot Bar Ass'y.	56	15933	Dash Panel Ass'y.
26	15841	Front Axle Ass'y.—L.H.	57	710-0837	Oval Hd. Cr.—Sunk Scr. #10 x 5/8" Lg.
27	712-0241	Hex Nut 3/8-24 Thd.*	58	736-0242	Bell-Wash.
28	736-0169	L-Wash. 3/8" I.D.*	59	736-0187	FI-Wash. (Hardened)
29	723-0156	Ball Joint 3/8-24 Thd.	60	736-0174	Wave Wash.
30	711-0613	Tie Rod			

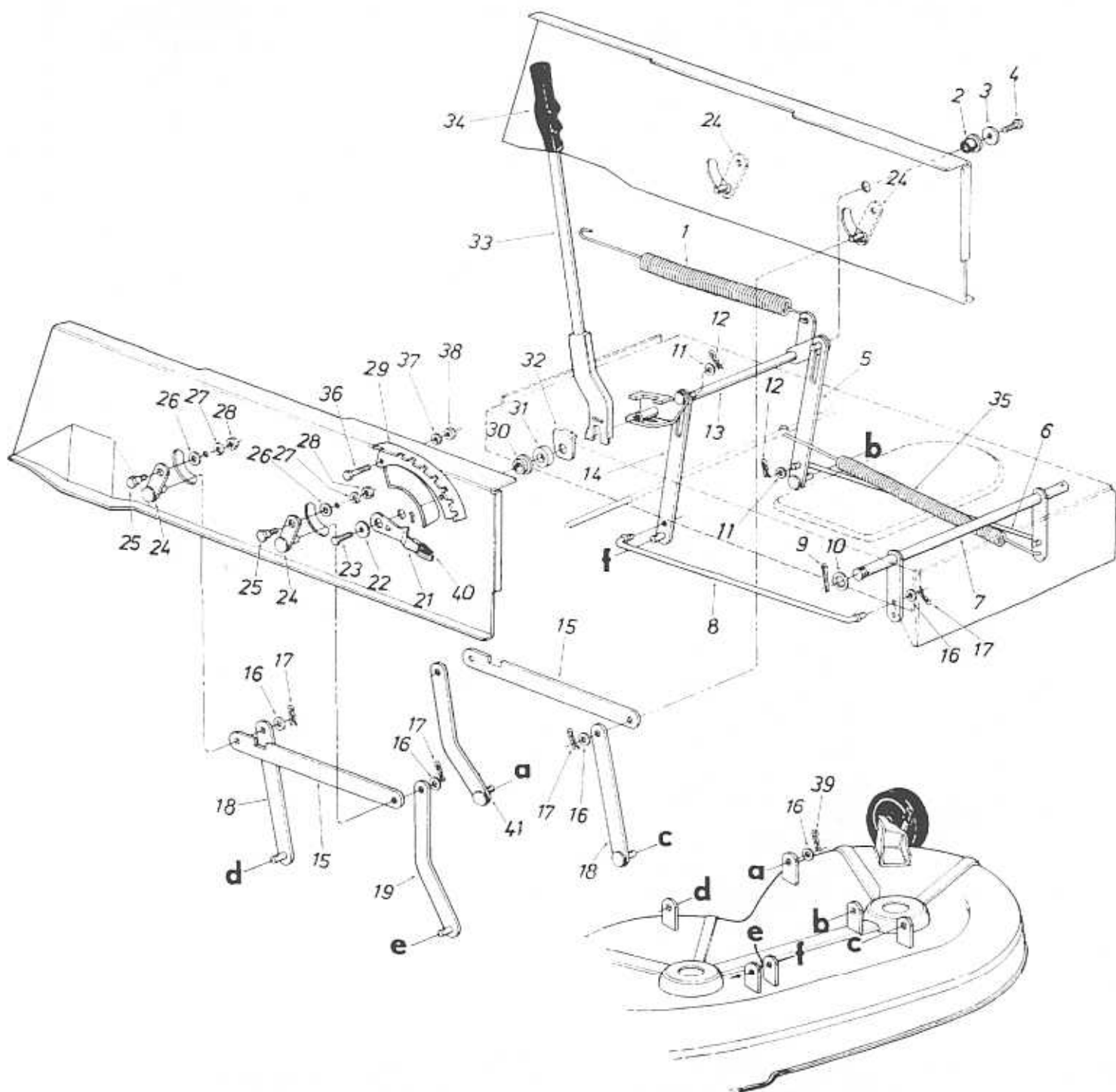
*Common Hardware—May be purchased locally.
Important: **Do not** order by reference number (Ref. No.)

**Front Wheel Chart

Description	13 x 5 (TMO-33902A)	15 x 6 (TMO-33886C)
Wheel Ass'y. Complete	734-0999	734-0998
Rim Only	734-0986	734-0997
Tire Only	734-0495	734-0498
Grease Fitting	737-0146	737-0146

TMO-33902A

TMO-33886C



TMO-33902A

TMO-33886C

10 H.P. 38" LAWN TRACTORS PARTS LIST FOR MODELS TMO-33902A AND TMO-33886C

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	732-0307	Extension Spring .99" O.D. x 11.00" Lg.	23	710-0604	Hex Wash. Hd. Self-Tap Scr. 5/16-18 x .62" Lg.
2	741-0313	Flange Bearing .634" I.D.	24	09721	Pivot Link Ass'y.
3	736-0231	Fl-Wash. .344" I.D. x 1.125" O.D. x .125	25	738-0140	Shld. Bolt .437" Dia. x .180" Lg. (5/16-18)
4	710-0604	Hex Wash. Hd. 5/16-18 x .62" Lg.	26	736-0264	Fl-Wash. .344" I.D. x .62" O.D.
5	14802	Link Deck Lift Ass'y.	27	736-0119	L-Wash. 5/16" I.D.*
6	711-0738	Stabilizer Rod	28	712-0267	Hex Nut 5/16-18 Thd.*
7	14647	Stabilizer Shaft Ass'y.	29	14633	Index Brkt.
8	711-0738	Stabilizer Rod	30	736-0341	Flange Wash. .628" I.D. x 1.25" O.D.
9	714-0470	Cotter Pin 1/8" Dia. x 1 1/4" Lg.*	31	735-0216	Rubber Wash. 1.50" O.D. x .63" I.D. x .60
10	736-0156	Fl-Wash. .635" I.D. x 1.12" O.D.	32	14654	Retainer Washer—Lift Handle
11	736-0192	Fl-Wash. .531" I.D. x .940" O.D.	33	14645	Lift Handle Ass'y.
12	714-0101	Inter. Cotter Pin .50" Dia.	34	720-0157	Grip (Lift Handle)
13	14641	Lift Shaft Ass'y.	35	732-0410	Extension Spring .99" O.D. x 13.25" Lg.
14	14802	Link Deck Lift Ass'y.	36	710-0118	Hex Bolt 5/16-18 x .75" Lg.*
15	09735	Connecting Rod	37	736-0119	L-Wash. 5/16" I.D.*
16	736-0300	Fl-Wash. .40" I.D. x .88" O.D.	38	712-0267	Hex Nut 5/16-18 Thd.*
17	714-0104	Inter. Cotter Pin For 3/8" Rod	39	714-0101	Inter. Cotter Pin
18	14804	Link Deck Hanger Ass'y.	40	08540	Knob
19	14800	Link Deck Hanger Ass'y. (Dog Leg)	41	15925	Link Deck Hanger Ass'y.—L.H.
21	732-0412	Deck Lift—Down Stop			
22	736-0231	Fl-Wash. .344" I.D. x 1.125" O.D. x .125			

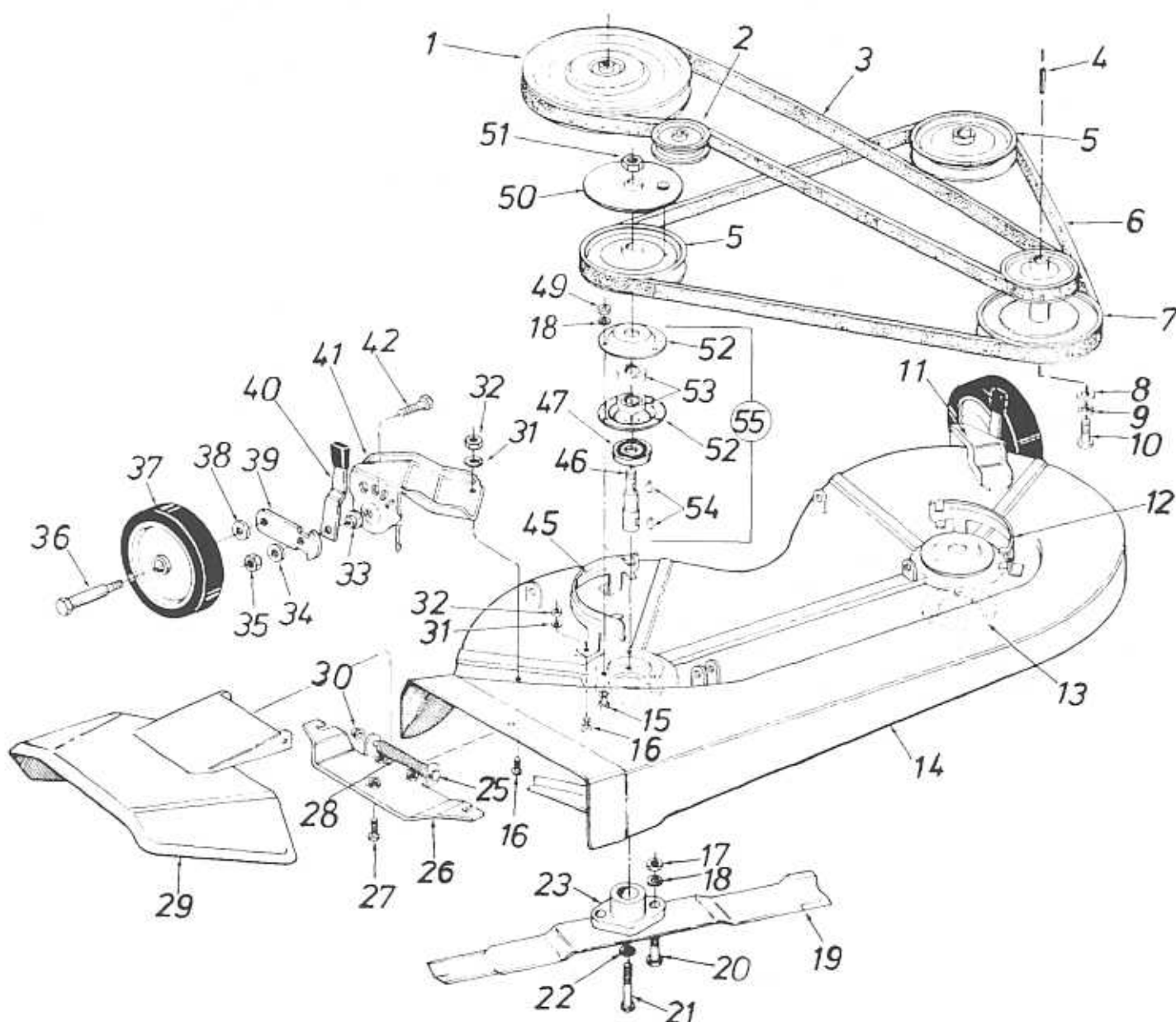
*Common Hardware—May be purchased locally.
Important: **Do not** order by reference number (Ref. No.)

TMO-33902A TMO-33886C



IMPORTANT

Belts listed by Part Number are of special construction and should be used when replacement is necessary. The dimensions and description given are for general reference only and belts purchased by description and dimension generally will only provide a temporary service.



TMO-33902A

TMO-33886C

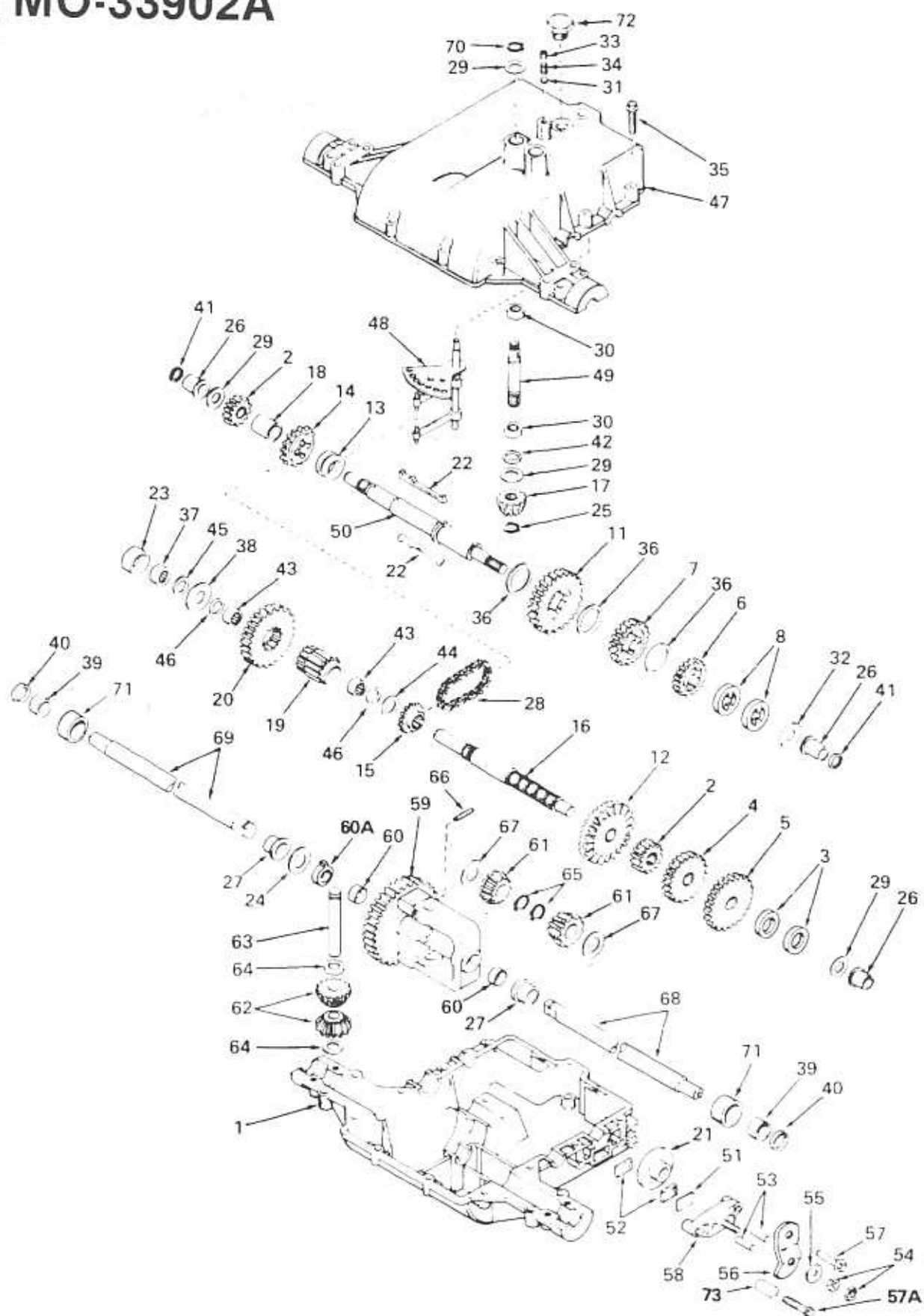
10 H.P. 38" LAWN TRACTORS

PARTS LIST FOR MODELS TMO-33902A AND TMO-33886C

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	756-0374	Transaxle Pulley	27	710-0599	Hex Wash. Self-Tap Scr.
2	756-0225	Flat Idler Pulley 3/8" I.D. x 2.75" O.D.	28	732-0261	1/4-20 x .50" Lg.
3	754-0266	"V"-Belt "A" Glass 85" Lg. Bare Back	29	11633	Torsion Spring
4	714-0114	Sq. Key 1/4" x 1/4" x 2.0" Lg.	30	726-0106	Chute Cover Ass'y.—Comp.
5	756-0251	Pulley 4.75" O.D.	31	736-0329	Push Nut 1/4" Rod
6	754-0145	"V"-Belt 21/32 x 69" Lg.	32	712-0287	L-Wash. 1/4" I.D.*
7	756-0373	Two Step Engine Pulley	33	748-0279	Hex Nut 1/4-20 Thd.*
8	736-0322	Fl-Wash. 7/16" I.D. x 1.25 O.D. x .180	34	736-0219	Shld. Spacer
9	736-0171	L-Wash. 7/16" I.D.*	35	712-0181	Bell-Wash. .400" I.D. x 1.13"
10	710-0757	Hex Bolt 7/16-20 x 1.50" Lg.*	36	738-0373	Hex Top L-Nut 3/8-16 Thd.
11	09082	Wheel Brkt.—L.H.	37	734-0973	Shld. Bolt .498" Dia. x 1.53"
12	12672	Belt Guard—L.H.	38	736-0105	Plastic Wheel 5.0" x 1.38"
13	09164	Plate Deck Reinforcement	39	10937	Bell-Wash. .400" I.D. x .88"
14	14662	38" Deck Ass'y.	40	14082	Pivot Bar
15	710-0322	Hex Sems Bolt 5/16-18 x 1.00" Lg.*	41	09080	Spring Lever Ass'y. w/Knob
16	710-0289	Hex Bolt 1/4-20 x .50" Lg.*	42	710-0253	Wheel Brkt.—R.H.
17	712-0123	Hex Nut 5/16-24 Thd.*	45	12673	Hex Bolt 3/8-16 x 1.00" Lg.*
18	736-0119	L-Wash. 5/16" I.D.*	46	711-0255	Belt Guard—R.H.
19	742-0122	19" Blade	47	13703	Blade Spindle
20	710-0888	Hex Bolt 5/16-24 x 1.00" Lg. (Grade 5)	49	712-0267	Bearing Shield
21	710-0459	Hex Bolt 3/8-24 x 1.50" Lg. (Grade 5)	50	09322	Hex Nut 5/16-18 Thd.*
22	736-0217	L-Wash. 3/8" I.D. (Heavy Duty)	51	712-0261	Brake Disc
23	10769	Blade Adapter Kit	52	08253	Hex Jam L-Nut 5/8-11 Thd.
25	711-0571	Hinge Pin	53	741-0919	Bearing Housing
26	11396	Adapter Plate	54	714-0365	Ball Bearing .787" I.D. x 1.85" O.D.
			55	09321	#6 Hi-Pro Key 5/32" x 5/8" Dia.
				14777	Blade Spindle Ass'y. 38" Deck Ass'y. Comp. (Service Only)

*Common Hardware—May be purchased locally.
Important: **Do not** order by reference number (Ref. No.)

TMO-33902A



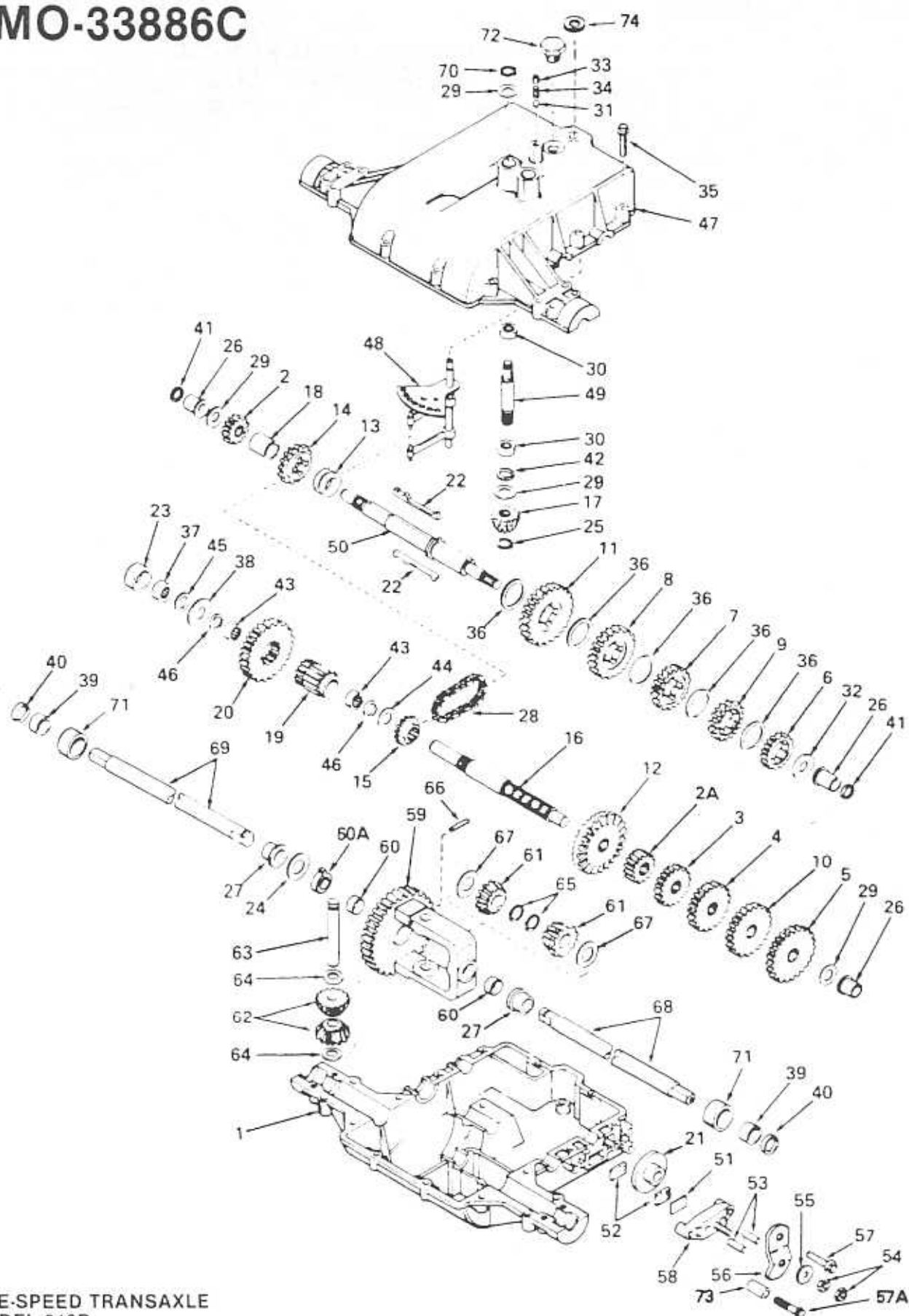
THREE-SPEED TRANSAXLE MODEL 817

TMO-33902A

PARTS LIST FOR THREE-SPEED TRANSAXLE MODEL 817

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	PE-770071	Case, Transaxle	39	PE-530105	Bearing, Needle
2	PE-778136	Gear, Spur (15 Teeth)	40	PE-788042	Seal, Oil
3	PE-786071	Spacer (1-1/8" O.D. x 3/4" I.D. x 3/8" Thick)	41	PE-788051	Ring, Square Cut
4	PE-778127A	Gear, Spur (25 Teeth)	42	PE-792001	Ring, Square Cut
5	PE-778129A	Gear, Spur (30 Teeth)	43	PE-780112	Bearing, Needle
6	PE-778121A	Gear, Spur (20 Teeth)	44	PE-780114	Washer, Flat
7	PE-778123A	Gear, Spur (25 Teeth)	45	PE-788052	Ring, Square Cut
8	PE-786072	Spacer (1-3/8" O.D. x 1-1/8" I.D. x 3/8" Thick)	46	PE-788053	Ring, Square Cut
11	PE-778125	Gear, Spur (35 Teeth)	47	PE-772077A	Cover, Transaxle
12	PE-778137	Gear, Bevel (42 Teeth)	48	PE-784290	Rod and Fork Ass'y., Shift
13	PE-784266	Collar, Shift	49	PE-776140	Shaft, Input
14	PE-786083	Sprocket (18 Teeth)	50	PE-776184	Shaft, Brake
15	PE-786082	Sprocket (9 Teeth)	51	PE-790007	Plate, Brake Pad
16	PE-776181	Shaft, Counter	52	PE-790006	Pad, Brake
17	PE-778113A	Bevel Pinion, Input	53	PE-786026	Pin, Dowel
18	PE-786074	Spacer	54	PE-792075	Lock Nut, 5/16-24
19	PE-778138	Pinion, Output	55	PE-792076	Washer, Flat
20	PE-778139	Gear, Output	56	PE-790004	Lever, Brake
21	PE-790003	Disk, Brake	57	PE-792073	Screw, Hex Hd. Thread Forming, 1/4-20 x 1 1/4
22	PE-792089A	Key	57A	PE-792085	Screw, Hex Hd. Thread Forming, 1/4-20 x 2 1/4
23	PE-786075	Spacer	58	PE-790005	Holder, Brake Pad
24	PE-780001	Washer	59	PE-778053A	Gear Ass'y., Differential (Incl. 2 of No. 60)
25	PE-788040	Ring, Retaining	60	PE-780064	Bushing
26	PE-780105	Bushing, Flanged	60A	PE-780120	Bushing
27	PE-780118	Bushing, Flanged	61	PE-778067	Gear, Bevel
28	PE-786081	Chain, Roller (No. 41 Chain, 24 Links)	62	PE-778068	Pinion, Bevel
29	PE-780072	Washer, Thrust	63	PE-786034	Pin, Drive
30	PE-780086	Bearing, Needle	64	PE-780065	Washer, Thrust
31	PE-792077	Ball, Steel	65	PE-792018	Ring, Retaining
32	PE-780109	Washer, Thrust	66	PE-792040	Pin, Roll
33	PE-792078	Screw, Set, 3/8-16 x 3/8	67	PE-780001	Washer, Thrust
34	PE-792079	Spring	68	PE-774420	Axle (14-7/8" Long)
35	PE-792073	Screw, Hex Hd. Thread Forming, 1/4-20 x 1 1/4	69	PE-774419	Axle (13-3/4" Long)
36	PE-780108	Washer, Thrust	70	PE-792035	Ring, Retaining
37	PE-780111	Bearing, Needle	71	PE-786084	Spacer
38	PE-780113	Washer, Flat	72	PE-792074	Plug
			73	PE-786066	Spacer

TMO-33886C



FIVE-SPEED TRANSAXLE
MODEL 813B

TMO-33886C

PARTS LIST FOR FIVE-SPEED TRANSAXLE MODEL 813B

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	770071A	Case, Transaxle	39	530105	Bearing, Needle
2	778136	Gear, Spur (15 Teeth)	40	788042	Seal, Oil
2A	778145	Gear, Spur (12 Teeth)	41	788051	Ring, Square Cut
3	778151	Gear, Spur (15 Teeth)	42	792001	Ring, Square Cut
4	778126A	Gear, Spur (20 Teeth)	43	780112	Bearing, Needle
5	778129A	Gear, Spur (30 Teeth)	44	780114	Washer, Flat
6	778121A	Gear, Spur (20 Teeth)	45	788052	Ring, Square Cut
7	778124A	Gear, Spur (30 Teeth)	46	788053	Ring, Square Cut
8	778125	Gear, Spur (35 Teeth)	47	772077B	Cover, Transaxle
9	778123A	Gear, Spur (25 Teeth)	48	784290	Rod and Fork Ass'y., Shift
10	778127A	Gear, Spur (25 Teeth)	49	776140	Shaft, Input
11	778146A	Gear, Spur (37 Teeth)	50	776184A	Shaft, Brake
12	778137A	Gear, Bevel (42 Teeth)	51	790007	Plate, Brake Pad
13	784266	Collar, Shift	52	790006	Pad, Brake
14	786083	Sprocket (18 Teeth)	53	786026	Pin, Dowel
15	786082	Sprocket (9 Teeth)	54	792075	Lock Nut, 5/16-24
16	776181	Shaft, Counter	55	792076	Washer, Flat
17	778113A	Bevel Pinion, Input	56	790004	Lever, Brake
18	786074	Spacer	57	792073	Screw, Hex Hd. Thread Forming, 1/4-20 x 1-1/4
19	778138	Pinion, Output	57A	792085	Screw, Hex Hd. Thread Forming, 1/4-20 x 2-1/4
20	778139	Gear, Output	58	790005	Holder, Brake Pad
21	790003	Disc, Brake	59	778053A	Gear Ass'y., Differential (Incl. 2 of No. 60)
22	792089A	Key	60	780064	Bushing
23	786075	Spacer	60A	780120	Bushing
24	780001	Washer	61	778067	Gear, Bevel
25	788040	Ring, Retaining	62	778068	Pinion, Bevel
26	780105A	Bushing, Flanged	63	786034	Pin Drive
27	780118	Bushing, Flanged	64	780065	Washer, Thrust
28	786081	Chain, Roller (No. 41 Chain, 24 Links)	65	792018	Ring, Retaining
29	780072	Washer, Thrust	66	792040	Pin, Roll
30	780086	Bearing, Needle	67	780001	Washer, Thrust
31	792077	Ball, Steel	68	774420	Axle (14-7/8" Long)
32	780109	Washer, Thrust	69	774419	Axle (13" Long)
33	792078	Screw, Set, 3/8-16 x 3/8	70	792035	Ring, Retaining
34	792079	Spring	71	786084	Spacer
35	792073	Screw, Hex Hd. Thread Forming, 1/4-20 x 1-1/4	72	792074	Plug
36	780108	Washer, Thrust	73	786066	Spacer
37	780111	Bearing, Needle	74	792083	Washer
38	780113	Washer, Flat			

SERVICE NATIONWIDE

Montgomery Ward



HOW TO OBTAIN REPLACEMENT PARTS AND SERVICE

The merchandise you have purchased from us has been carefully engineered and manufactured under Wards rigid quality standards and should give you satisfactory and dependable operation. However, like all mechanical merchandise, it may occasionally require adjustment, replacement parts or maintenance. Should you ever need technical assistance or parts, please contact or write your nearest Wards Retail Store, Central Service Center, Catalog Store or Catalog House.

Provide the following:

1. Model, serial number and all of the other data shown on the model plate.
2. The date and the Wards branch from which you purchased your merchandise.
3. State briefly the trouble you are having.
4. Also give the part number or numbers as shown in the parts list that came with the product.

Replacement Parts will be made available at current prices. If requested, prices will be quoted in advance when not listed.

If you order parts by mail, you will pay the transportation charges from the shipping point.

UNIT MODEL NO. _____

UNIT SERIAL NO. _____

ENGINE MODEL NO. _____

TYPE NO. _____

CODE NO. _____